1908

THAKUR JAIDEVA SINGH

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PHILOSOPHY OF EVOLUTION: WESTERN AND INDIAN

(SPECIAL LECTURES)

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Prasārānga
University of Mysore
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PUBLISHER'S NOTE

We are extremely happy to present this small book "Philosophy of Evolution: Western and Indian" to the readers.

We are under a deep debt of gratitude to Prof. Thakur Jaideva Singh, Retd. Professor of Philosophy, Varanasi, for kindly accepting our invitation to deliver a course of three lecturers on the subject but also for permitting us to publish the lectures in the present book form.

Mysore
27-5-1970

PRABHU SHANKARA
Director

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I

WESTERN PHILOSOPHY OF EVOLUTION

Nothing perhaps has dominated the mind of thinkers in modern times so much as the concept of evolution. Rudolf Metz says in his 'A Hundred Years of British Philosophy', "It was because the idea of evolution was in the air about the middle of the century that it appeared simultaneously from several independent sources and broke like a hurricane on the entire intellectual life of the day, sweeping everything with it". Books have been written on the evolution of stars, society, art, life, consciousness etc. In these lectures, we shall confine ourselves to the evolution of life and consciousness.

The Concept of Evolution

Evolution is best understood in contrast with creationism. People at first believed that the universe and all that is therein—the stars, heaven and earth, plant, animal and man - all were created by a fiat of God. This belief involved two ideas :

1) Things were created ex nihilo i.e., out of nothing. There were no material causes of their existence. Only God's fiat was enough to produce them.

2) Once things were created, they have continued in the same way without any change.

But as people began to mark changes, they lost their faith in things permanently fixed, static, unchanging. There were thinkers that brought the fact of change prominently to men's minds. "All things flow. You cannot cross the same river twice", said Heraclitus. Everything is in constant flux. If things change, do they do so into something higher ? Or is there change only for the sake of change ? If they change into something higher, do they do so according to some law or order or only haphazardly. Thus arose the problem of evolution. Great thinkers like Darwin, Lamarck, Lloyd Morgan, Alexander, Bergson, Hegel, Smuts and Whitehead tackled this problem and gave us a philosophy of evolution.

The word 'evolution' is derived from the verb 'evolve' (e, out, and volvo, to roll) and means rolling out, unfoldment, development. Evolution is a theory of development by orderly, progressive changes. The word 'orderly' means that the development takes place according to some law, some pattern. The word 'progressive' means that the development is in the direction of greater complexity and a higher degree of organization, of life and mind.

Western thinkers have attacked the problem of evolution from two points of view, viz., (1) biological and (2) metaphysical. The biological thinkers have generally traced the evolution of life; the metaphysical thinkers have generally traced the evolution of thought or mind also. We shall take up those thinkers first who have developed a theory of organic evolution or the evolution of life.

Organic Evolution

An organism is a living being— a plant or an animal. Organic evolution traces the growth and development of an organism. It is believed by many biologists that life is a unique entity that cannot be derived from non-living matter. The belief is summed up in the maxim, 'Omne vivum ex vivo' – all life comes from life, or 'Omne vivum ex ovo' —all life comes from an egg.

The main characteristics of a living body or organism are nutrition, irritability, reproduction, and self-protection. An organism grows by the assimilation of food; it is responsive to stimuli; it adjusts itself to the environment; it reproduces organism like itself, and it protects itself against all possible injury.

The belief that life is due to a vital principle which is a special feature and entirely distinct from all forms of matter and mechanical forces is known as *vitalism.*

With life is connected also the development of mind. When we arrive at highly integrated living bodies, certain qualities appear such as sensibility, instinct, selective choice, memory and intelligence. These are all mental qualities. Mind is intimately associated with life.

We have seen that there are thinkers who believe that life comes only from life, and that this belief is known as *vitalism.* There are, however, other thinkers who deny the existence of any such thing as a vital principle and maintain that life is due to the action of ordinary physical and chemical forces. Such a view is known as *mechanism*. We shall, therefore, study the theories of organic evolution under two heads; viz., mechanistic and vitalistic.

Mechanistic Theories :

Mechanism believes that there is no difference between the living and non-living. The difference between the organic and the inorganic is only due to the difference in the degree of complication, number and arrangement of the material particles in motion. We need not assume any mysterious vital force to account for life. Mechanism advocates the theory of spontaneous generation of life from lifeless matter.

Let us study some of the chief mechanistic theories of evolution.

Darwinism :

Charles Darwin was a great naturalist. His 'Origin of Species' was published in 1859 and 'Descent of Man' in 1871.

He maintains that every species of animal produces far more than can actually find the means of subsistence. For instance, a kind of cod fish produces two hundred million eggs. Since plant and animal species produce so many of their kind, there can be neither room, nor food enough for all of them in this world. So there is a *struggle for existence* in which there is survival of the fittest. Those that are *best adapted to the environment* are the fittest and they alone survive.

Those individuals of aspecies that by some chance come to acquire slight variations in structure that are favourable for adaptation to the environment are selected and preserved by Nature. This is known as 'natural selection.' They will grow and propagate and transmit their favourable variations to their progeny according to the law of heredity. Gradually the structure will be modified and in course of time, the modification may become so great that it may result in the formation of a new species.

'Natural selection' is the key-word in Darwin's theory of evolution. There are three factors involved in Darwin's theory of evolution, viz., (1) Struggle for existence, (2) Chance variation (3) and heredity.

Darwin's theory is open to a few serious objections.

1) He says that the evolution of lower species into a higher one is due to chance variation. To appeal to chance for the explanation of variation in structure is thoroughly unscientific.

2) Hereditary transmission of accidential variation is another serious flaw in Darwin's theory. Do accidental variations occur simultaneously both in the male and female ? Darwin is silent on this point.

3) What does struggle for existence mean ? It implies a 'will to live', an inner impulse in the animal for the zest of life. It is in this primordial impluse that the secret of evolution lies. Darwin talks of the 'struggle for existence' without taking note of the implication of the word 'struggle'. 'Struggle' cannot mean mere mechanical adjustment of the organism to the environment.

4) Weismann and other scientists have shown that heredity is not due to the body–cells, but to the germ–cells. If some variation has occured in a particular part of the body, it does not mean that it can be transmitted

to the off-spring. The germ-cells are not affected by any change in the body-cells and it is only the germ-cells that are responsible for the transmission of any particular characteristic to the progeny.

5) Smuts has shown in his 'Holism and Evolution' that the body is an organic whole of different parts. Variation in one part necessitates changes in various other parts for the adjustment of the body as a whole. Natural selection stands baffled before the marvellous co-adaptation of structures and co-ordination of functions. It can deal with a particular variation and not a comblex adjustment of the various parts of the body as a whole.

6) Finally, what is this 'natural selection'. Is it some force or agency or strategy? Can we ascribe any such intelligent decision to Nature? This is not possible on the mechanistic assumption of Darwin. 'Natural selection' is, at best, only the name of a sifting process in nature by which those individuals who are not well-fitted to the environment are thrown out. That is why natural selection has sometimes been dubbed natural rejection. Natural selection is just a metaphor and nothing more.

Herbert Spencer

Herbert Spencer maintained that the Absolute is unknowable. Matter, motion and force are the only knowable modes of the Absolute. According to Herbert Spencer, "Evolution is an integration of matter and concomittant dissipation of motion, during which the matter passes from an indefinite, incoherent homogeneity to a definite, coherent, heterogeneity, and during which the retained motion undergoes a parallel transformation".[2] This means in simple language that evolution proceeds from the indefinite to the definite, from the simple to the complex, from an undifferentiated mass to differentiation. Take for instance, the amoeba, the simplest type of living entity. It is an undifferentiated, homogeneous mass of protoplasm. The higher animals evolve by differentiation of parts. The eye is formed for vision, the ear for hearing, certain organs are set apart for digestion, and some for locomotion. Evolution, therefore, means increasing diversity *in* the parts and increasing interdependence *of* the parts. The higher an animal is in the scale of evolution, the better is it adapted to the environment.

Herbert Spencer's theory was very muc like Darwin's. Only he believed like Lamarc that acquired modifications in an organism ar transmitted to the offspring.

Spencer's theory of evolution is als mechanistic. According to him, evolutio takes place in order that an organism may b adjusted to the environment, does evolutio stop at that? Spencer could not conceive o a goal for evolution, and without a goal evolution becomes meaningless. Summing u Herbert Spencer's theory in the 'Story of Philosophy', Will Durant says, "Spencer began like a scientist, with observation, he procee like a scientist, to make hypotheses; but then unlike a scientist, he resorted not to experiment, nor to impartial observation, but to th selective accumulation of favourable data. H had no nose at all for 'negative instances' ".[3]

Weismann

Weismann's theory of evolution was als mechanistic. His main contribution was towards the clarification of heredity. He maintains that heredity does not depend upon th body-cells, but upon the transmission of th germ-cells. The germ-cells are not affecte by any change or changes in the body-cells. The essential germinal material in the parent egg-cell is not used in the formation of the body of the progeny, but is reserved unchanged for the formation of the germ-cells of the next generation. The germ-cells are in a sense immortal. They are transmitted from generation to generation according to their own law of variations.

Weismann lays stress only on the spontaneous variation of the germ-cells. He ignores the factor of adaptation of the organism to the environment.

Weisman believes that there is a struggle for existence among the germ cells and only the strongest genes survive. Smuts rightly remarks that Weismann carries the arena of struggle from outside to inside 'where it is beyond observation, and where its operation, if any, is pure guess work.'

De Vries

In 1930, De Vries contributed a new idea to the theory of evolution. He expressed it by the word 'mutation'. By mutation he meant a change resulting in the production of a new species. According to the strict theory of variations, like produces like, but not just like. According to the theory of mutation, like ordinarily produces like, but sometimes, something wholly different may be produced so that it may be called a new variety or even a new species. A new species transmits its progeny by heredity.

Mutations are caused by purely internal conditions. According to the mutation theory, entirely new and unexpected species emerge in life.

It has been observed by eminent biologists that De Vries' mutation theory cannot be made a universal law. All his experiments were carried out on inferior forms of plant life which were suddenly seen to be changing from one species to another. They say that his mutations do not prove the emergence of new characters but the setting free of latent characters already existing. Mutation is a rare phenomenon and cannot be the common method of evolution.

A critical estimate of the mechanistic theories of evolution :

1) All these theories consider evolution

to be the outcome of chance variation in structure and function. There is neither any goal nor any plan. The world, according to these theories, is an automatic machine which somehow brings about the adaptation of organic life to the environment.

2) If there is no goal in evolution, it can hardly be called evolution. Evolution really means an ascent of life and consciousness towards a goal.

3) Matter cannot evolve life and mind. The physical principles are different from vital and mental principles. The mechanistic thinkers seem to believe that life and mind are simply evolutes of matter. Evolution of life and mind from matter is possible only when these principles pre-exist in matter.

4) These thinkers confine their observation only to the evolution of organic life. They have mostly ignored the evolution of mind-from mere instinct in the animal upto intellect and spiritual consciousness in man.

Viialistic Theories of Evolution

Let us now take up some of those thinkers who believe that life is a principle wholly distinct from matter. Life adjusts itself, maintains itself, perpetuates itself. The mechanistic explanation breaks down in explaining life.

The evolutionary principle is intelligible only on the assumption of some *organising or directive agency*, but mechanism holds that evolution is due to a chance combination of material particles moving blindly in space. Life could not be due to mere chance.

Life is autonomous and cannot be described merely in terms of matter and motion. The restituiion of function and regeneration of lost parts are facts that go wholly against mechanism. When a part of an organism is injured, its function is taken over by another part which has a different function. This shows that life has a capacity to meet an emergency in a new way, and this capacity cannot be explained in terms of mechanism.

The vitalists, therefore, reject the mechanistic theory of evolution. They hold that life is due to a non-material force, called 'vital principle'. Hans Driesch, a German vitalist gave the name 'entelechy' or 'psychoid' to the vital principle. He borrowed the term 'entelechy' from Aristotle. The Word means a 'perfecting principle'. We shall now take up the theories of evolution as propounded by some of the important vitalists.

Lamarck

Lamarck was a French naturalist. According to him, changes in the organs and functions of an organism are not due to any chance, but to *needs* or *wants* which the animal feels, to the movements which it makes in order to fulfil those needs or remove those wants. So the variations acquired by an animal are guided by a purpose. Thus evolution according to Lamarck is purposive.

Lamarck held that the environment modifies individual organisms and the modifications thus produced are transmitted by the organisms to their offspring. Use and disuse of bodily organs also play their part in the modification of organisms. These modifications are acquired characters, and since according to him, they are passed on by inheritance, his theory came to be known as the 'inheritance of acquired characters'.

The giraffe, for instance, did not have a long neck at first. He had to stretch his neck constantly to get the tender leaves at the top of trees. This produced a modification in his neck, i.e. it was elongated. This modification i.e. elongation of the neck was inherited by the generations that followed, and so the giraffe came to have an elongated neck.

According to Lamarck, four factors are involved in the evolution of species, viz. (1) modification of an organism by the influence of environment (2) organic needs and desires (3) Use and disuse of certain organs, and (4) inheritance of certain acquired characters.

The researches of Weismann and other biologists have shown that acquired characters cannot be transmitted to the progeny. It is only variations in the germ-cells that can be inherited by the off-spring. Acquired characters do not affect the germ-cells and it is only the germ-cells that are the carriers of heredity.

Teleology

The question of end or teleology is closely associated with the concept of evolution. Teleology means that things in the world are determined by a final purpose or end. As opposed to Mechanism which explains the present and the future in terms of the past, teleology explains the past and the present in terms of the future.

Teleology believes that the universe is so constituted that there is always an adaptation of means to ends, and of lower ends to higher ones. The various parts of the body, for instance, are means for accomplishing certain ends. Even in such a humble thing as a tree, the various parts serve certain ends. The leaves serve as the lungs taking up carbon dioxide from the air, the rootlets absorb the moisture from the earth, the strong trunk resists the wind, and the rough bark protects the vital parts of the tree. This goes to show that there is some purpose in life, and things are not simply the products of blind, mechanical forces.

The one question that presses itself upon our attention in connection with evolution is whether different forms of life come into being with some purpose or only haphazardly. Is man, for instance, only an accident in Nature or has he been evolved from lower forms to express some higher end of life?

Teleology maintains that the whole world is moving towards 'a far off, divine event', that evolution of the lower into the higher species takes place to manifest higher grades of life and mind.

If we do not accept teleology, the other alternative is chance. It is difficult to believe that this world is simply the product of a chance collision of atoms of matter· One might as well maintain that Shakespeare's plays are the outcome of an explosion in a printing office. We may not be able to find out the purpose of every thing in Nature, but the vast panorama of Nature and life are guided by reason, intelligence, end. They cannot be the mere outcome of a blind concourse of atoms in motion. The world is rational, orderly through and through. It is a cosmos, not a chaos. According to teleology, the universe is not a machine designed or planned by an outside intelligence. It does not believe in the carpenter theory or the watch-maker theory of the universe. Teleology does not advocate a static purposiveness, but rather an immanent, dynamic purposiveness. It maintains that intelligence is immanent in the universe in which the end or ideal is being actualised.

Martinean points out that there are three important marks of purpose, viz., selection, combination and gradation. For instance the different limbs of animals have been selected in such a way that they fit with one another. Combination is found in the correlation of organs which means that the growth and development of the various organs take place together, that none of the organs can change in form without the other also changing. There is also gradation which means that the lower form of existence becomes a support for the higher grade of life. Lifeless matter is the support for life, and life becomes a support for the next higher grade, viz., conscious existence.

Many writers maintain that purposiveness is apparent even in inorganic nature. In his 'Fitness of the Environment', Henderson says that before life appeared upon our planet, the environment was already fitted for its reception. The earth's surface was cooled and carbon, oxygen and hydrogen appeared in necessary proportions. Great quantities of water, the nearly constant temperature of the ocean, the unique expansion of water at the freezing point — these are all evidence of the fitness of the environment for life. These preparations go to show that the universe is 'biocentric'.

When we reach the level of living organisms, we find that the mechanistic explanation breaks down completely. The cause-effect relation which is fundmental in mechanism does not provide full explanation of life. It has to be supplemented by the relation of *means* and *end.* Life is a good, an end, and food, air and water are means. As G. T. W. Patrick puts it, "Where broadly speaking, the facts challenge us to say, not merely that B is the effect of A, but that B is *the reason why* or *that for the sake of which* A exists or occurs, there we have the *immanent purposiveness* of living things".[4]

A living thing is an autonomous unit in which all parts are functionally related to one another and exist in the service of the whole. Patrick very rightly says, "In organic bodies, *the part is for the sake of the whole and the integrity of the whole is a value*, and this is all that is necessary to give us the teleological or purposive character of nature".[5] There is adaptation, organisation, and structural harmony in organisms, and all this is indicative of purpose. Teleology means that an Absolute mind or God is immanent in Nature, and it is mind that is the driving force of all evolutionary movement.

It may be said that purpose or goal is a human category and purpose shows some want which needs to be fulfilled. How can we apply this human category to God? And if we do, we turn him into a finite being who is in some want. The answer is that by teleology we are not to conceive of purpose in the human way as the fulfilment of some want. By purpose is here meant a rational order as opposed to blind chance. It is not the attainment of something of which God is in dire need, but the unfoldment of an order, of a plan, of the realisation in the universe of an idea which is already in God's mind, self-expression, self-revelation.

Having seen that the idea of teleology is closely associated with evolution, we may now proceed to study what other important thinkers have to say about evolution.

Creative Evolution

According to some great thinkers, evolution is due to creative activity. Creative activity or creative synthesis is a very significant concept. It means that there is a wonderful process of organization in Nature by which new processes, new powers or activities appear. The succeeding forms in the scale of evolution are not merely an arithmetical sum of the preceding elements but evince some new quality which cannot be calculated from the elements of which they are composed. Electrons and protons are organized into atoms, atoms into molecules, molecules into cells and cells into living bodies and at each level of organization, some new quality appears which is not simply an outcome of the old. Two parts of hydrogen and one part of oxygen combine to form a molecule of water, but there is a property in water which belongs neither to hydrogen nor to oxygen. Water quenches thirst and refreshes a plant; neither oxygen nor hydrogen can quench thirst. When we come to living matter or cells, we find still more surprising new qualities such as growth, irritability, adaptation, reproduction. These qualities are not a sum of the qualities of the elements of which a cell is composed. There is a peculiar 'flowing out' process in life which can by no means be explained in mechanistic terms.

The term 'creative' in creative evolution implies the production of something new and unique out of the given material. If we want to know the origin of life and mind, we shall have to go beyond Darwin. Evolution does not mean simply the actualization of the potential. It is integrative, expansive, creative. It brings about new qualities and new functions.

Bergson

Creative evolution is associated with Bergson, the famous French philosopher. He maintains that something new or unique appears at various stages in the evolutionary process. Evolution is not repetitive but creative. It does not simply go on repeat ng the old structures and functions, but brings about *new* structures and functions that were not present as such in the preceding orms.

He says that there is an inherent impulse n life, an *'elan vital*, a life-force which goes on reating ever new forms and functions. It is synonymous with Duration. Life is a dynamic principle. It creates as it moves and defies all calculations and predictions. He compares the process of evolution to the movement of a rocket bursting forth into infinite number of sparks unexpected and uncalculated.

Reality is pure flow of movement. Matter is the first creation of 'elan vital. Then arise instinct and intelligence. Intellect cuts up reality into bits, and is unable to grasp it. It is intuition alone which can follow the pure flow of reality. Intuition, according to Bergson, is 'a kind of intellectual sympathy by which we can enter into the heart of a thing and thereby coincide with what is unique in it and consequently inexpressible.'

Bergson's Opposition of Mechanism and Teleology

Bergson is opposed both to mechanism and teleology. He says that both are deterministic. According to mechanism, the present is determined by the past, and according to teleology, the present is determined by the future. Determination by the future is as much determination, as determination by the past. Teleology, according to Bergson. is inverted mechanism. Both mechanism and teleology or finalism are deterministic; they leave no scope for freedom or indetermination. Evolution, according to Bergson, is neither mechanical nor teleological; it is just creative. It is a continuous advance towards absolutely new creations undertermined by the past or future.

A Critical Estimate of Bergson's Theory

Bergson believes only in becoming without any being, a constant flow or movement without any static background.

Bergson has misunderstood the real import of teleology. The end or purpose is not something which is imposed on the universe from without, but it is immanent in it. Realization r actualization of an immanent end does not mean determination in the fatalistic sense, but nly rational order.

mergent Evolution

Another important thinker who has deveped his theory on similar lines is C. Lloyd Morgan. According to him, there are two nds of things in Nature which may be disnguished as 'resultants' and 'emergents'.

The 'resultants' are simply the effects of the antecedent conditions or causes. The 'emergents' are unpredictable novelties wcich supervene together with the resultants.

Lloyd Morgan propounded the theory of 'emergent evolution'. Emergent evolution maintains that life and mind are not merely 'resultants' of the preceding causes but 'emergents' i. e., something new supervening on the preceding conditions. Emergent evolution is only another form of creative evolution.

Lloyd Morgan maintains that something new and different must *emerge* or come into being from the antecedent stage in the process of evolution. Evolvtion, according to him, is a series of stages in which there is a new form of 'relatedness' or organization at each new level. The new kind of 'relatedness' is, however, *intrinsic* to the system; the emergence of new qualities does not depend on any new *external* relations.

The world, according to Lloyd Morgan, is like a pyramid. Near its base is a swarm of atoms; above this level the atoms combine to form new units which may be called molecularity. Above this level, on one line of advance, there is the crystalline form and on another line of advance, there are organisms which have the quality of life or vitality. At a still higher level, there is mind. The first new emergent level is matter; the next emergent is life; and the emergent next to life is mind.

What causes these emergents to appear? Lloyd Morgan believes that it is the activity of God who transcends the evolutionary process. He says, 'For better or worse, I acknowledge God as the Nisus through whose Activity emergents emerge, and the whole course of emergent evolution is directed. Such is my philosophic creed, supplementary to my scientific policy of interpretation'

Lloyd Morgan does not clarify whether the emergence at different levels occurs according to some determinate rule or is a matter of free creation.

He believes that God is immanent in the world, but he does not clarify whether God is transcendent also.

According to Lloyd Morgan, life, mind etc. appear as emergents, but he does not clarify whether these are already involved i matter.

Samuel Alexander's Theorv of Emergent Evolution

Alexander's theory of emergent evolutio resembles Lloyd Morgan's theory to a certai extent, and so it may be taken up here.

According to him Space–Time is the ultimate Reality; it is the stuff or matrix out o which things or events are made. Space an Time are interdependent; they do not exis separately. As he puts it, "Without space there would be no connection in Time. Without Time, there would be no points to connect"[7] Space–Time is dynamic. It is th Absolute of Alexander, and is evolving al things by the complex groupings of its elements. Space–Time is neither matter, no life; nor mind. It is identitical with motion All finite existences are simply modification of Space–Time. Emergence of new qualitie arises on account of complexities or differentiations within Space–Time. There is a inherent nisus or tendency in Space–Time t create evolutes. Matter, life, and mind are th evolutes of Space–Time. Nisus or the evolu tionry urge in Space–Time brings about ths emergence of new qualities. Alexander givee the name 'deity' to every new quality that emerges in the course of evolution. He gives a very wide meaning to the term 'delty'. Life is the deity for matter; mind is the deity for life. The infinite deity or God is still to emerge. Such God will, however, not be actual but ideal, for existence belongs only to determinate beings.

A Critical estimate of his theory

Like Lloyd Morgan, Alexander made an important point that at every stage, an evolute was an emergent, a new quality, and not merely a resultant of the preceding elements, but he considered Space–Time to be the Absolute Reality which, according to him, was closest to matter. How can life, mind, and deity emerge out of mere Space–Time ? Alexander has not been able to give any rationale, of such emergence. Space–Time is only a mathematical concept and entirely unconscious. It does not stand to reason that it can give rise to such a thing as life or mind.

His conception of nisus or evolutionary urge is also not satisfactory. Is it simply a form of Space-Time or different from it ? If the former, unconscious Space-Time becomes the originator of evolutionary movement, if the latter, the problem arises as to how Space-Time guides the nisus in its onward march.

Dr. Radhakrishnan rightly remarks, "Unless we assume the *nisus* to be a spiritual power ever drawing on its resources and ever expressing new forms, Alexander's whole account becomes unsatisfactory. The *nisus* cannot be an unconscious drive coming by degrees to consciousness in man. The creative spirit which is responsible for the *nisus* is not the result of the universe, as Alexander and others imagine, but its source as well, as the great religions and philosophies assert. If God is a future possibility, then religion as a human experience of worship of God is the worship of a fiction"[8].

So for we have studied those authors who have tackled the problem of evolotion from mechanistic or vitalistic or mathematical standpoint. We shall now study the theories of those thinkers who have considered evolution from a purely philosophic stanpoint, and for this purpose we may select Hegel, Smuts and Whitehead.

Hegel's Theory of Evolution

In order to understand Hegel's theory of evolution, we shall have to understand the nature of Reality or the Absolute and the process by which Reality evolves.

The nature af Reality or The Absolute

Reality, according to Hegel, is Thought, Reason, Idea or Spirit. The Absolute Idea or Thought is an active dynamic spiritual principle and so it acts and develops. In it, thinking and being coincide. Thought and Being are identical.

The Absolute is a unity. It is a self-active, self-developing, self-expressing being which differentiates itself endlessly into nature, and finite minds or selves but which always transcends its heterization or self-differentiation, which never loses itself in the process of the finite, which never ceases to be a unity in spite of its self-differentiation.

Reality is an inter-related unity or Whole or a Concrete Universal. Every entity in the world is related to other entities and the relations are not external, but they constitute the very being of the terms related. Thus Reality is an inter-related unity.

Reality is a Whole. A Whole is not, like an aggregate, merely the arithmetical total of the parts; rather the parts are what they are because of the whole; the nature of the parts is determined by the whole to which they belong.

A heap of pebbles is only an aggregate, but the organism is a whole by which each limb of the organism is determined.

The whole pervades the parts. What is meant by saying that the universe is a whole or unity is — that not a single thing in the universe can be rightly understood if it is taken in abstraction i. e. separated from the whole to which it belongs.

Again the whole is logically prior to the parts. The whole is not brought into being by the parts; rather the parts themselves are what they are because of the whole. The Reality or Absolute whole is, therefore, prior to its expression of itself in individual minds and the world.

The whole is more real than its parts, and it is more real, because it is more concrete.

Concreteness, according to Hegelian philosophy, depends upon the number and richness of the ingredients it contains. Concrete means the full, the whole from which nothing whatsoever has been abstracted or taken away.

The real, therefore, is neither the abstract universal, nor the abstract particular, but the Concrete Universal in which the universal and the particular are distinguishable but not separable. The whole as defined above is the Concrete Universal. There are degrees of reality in which one whole is more real than another according as it gathers more elements into itself than the other. Ultimate reality is found only in the Concrete Universal or whole in which all other wholes are contained only as parts. Only when a tning is abstracted from the whole that it can be said to have a separate being but then its being is not real but illusory. The only thing that is fully real s the Absolute which is the whole of all wholes.

Knowledge is an example of a whole or unity. It precedes the distinction between subject and object. Knowing is not an external relation which somehow binds the subject and object together, but it is an internal relation, a constituent part of the terms which it relates. The knowing mind, the object known and the relation between them constitute a whole of knowledge which is logically prior to the subject and the object which are only distinguishable aspects of it. The whole of knowledge is real and exists; the minds or subjects and objects are false abstractions, if they are regarded as existing saparately in their own right.

Self-consciousness is a very significant example of knowledge. The individual who is self-conscious is at once both subject and object. He finds within his self-consciousness both that which is known i. e. the self or object of consciousness and that which knows i. e. the self which is conscious.

Self-consciousness is fundamental in all knowledge, because we cannot know a thing without knowing that we know it. Self-consciousness has, therefore, a higher degree of reality than anything else, because it is more concrete.

Since the Absolute is a mind, it is a Whole that is self-conscious. We have seen that in self-consciousness the self is both the subject that knows and the object that is known. Even so the Absolute Whole constitutes the objects of its knowledge by externalizing itself and knows the objects that it has externalized.

The Absolute is a spiritual individual. An individual is one whose existence is fundamental i. e. logically prior to that of the parts or the members. It is distinguishable from them but not separate from them. It *expresses* itself in the parts instead of being made up of them. It is a unifying consciousness, all-inclusive, completely self-identical in its otherness. It is essentially a being that manifests itself, and is engaged in its self-discovery by its own movement, so that it may be truly said in the words of Pope

"All are but parts of one stupendous whole
Whose body nature is and God the soul".

The Dialectic

We have seen that according to Hegel, Thought is Reality. If we want to understand Reality, we must understand the nature of Thought. Startling as it may seem, contradiction or opposition is in the very nature of Thought and so in the very heart of Reality. Every thing tends to pass into its opposite. Without contradiction there would be no life or movement; reality would be just dead or static existence. But contradiction is not the whole truth. Reality does not stop at contradiction. Oppositions are overcome and reconciled. They become parts of a united whole and are, therefore, no longer oppositions. The opposites are opposites only with respect to one another, but their opposition is negated or sublated in the whole of which they are seen to be articulated parts.

The method of philosophy must reproduce the rational process or the course of evolving reason. This method of considering the contradictions and reconciling them in the concept of the whole has been called the *dialectic or dialectical method* by Hegel.

The dialectic is not simply a method of philosophy; it is the movement of thought itself. Thought posits a concept; it is opposed by a contradictory concept; finally it is composed by a third concept which unites on a higher plane the essential features of the initial concept and its opposite. There are three moments or stages in the dialectic method. We begin with an abstract universal concept; this is called *thesis* by Hegel. This concept gives rise to a contradiction or opposition; this is called *antithesis* by Hegel. The contradictory concepts are reconciled in a third concept which unites, on a higher plane, the essential features of both; this is called synthesis by Hegel. The three terms of the dialectic are together known as the 'triad'. Thus pure 'being' is thesis. It is opposed by 'non-being' which is its antithesis. Both 'being' and non-being are reconciled in becoming' which is their synthesis.

The dialectical movement is, according to Hegel, the logical self-unfolding of thought self. Reality is a living, developing logical process. In Hegel's hands, logic becomes Metaphysics; philosophy becomes panlogism or universal logic.

Hegel's philosophy of Evolution

We have seen that Reality, accarding to Hegel, is Thought, Idea, Reason or Spirit.

Thought is not something static, but dynamic, living, evolving process, Dialectic is the law of its evolution.

God is the Idea, 'the timeless totality of all the possibilities of evolution'. In evolution, something that is undeveloped, undifferentiated develops, differentiates, and the process goes on till we have a unified object. The higher stage in the process of evolution is the realization of the lower; in Hegel's words, it is the 'truth' of the lower; it is its purpose, its meaning. What is implicit in the lower becomes explicit in the higher.

Nature is only the otherness of spirit; it is only Thought externalized. In it, the Absolute reveals itself in outward form. Nature is the not-self and the Self knows itself only by distinguishing itself from the not-self. Knowledge of the not-self is, therefore, essential for a knowledge of the self. Self-consciousness would be impossible without a not-self or Nature from which the Self distinguishes itself. So also, the not-self is nothing without the self. Therefore the self or not-self, when each is taken by itself without the other is a meaningless abstraction.

Reality is, therefore, a synthesis of both. It is knowledge of which the self which knows and the not-self which is known are distinguishable but not separable aspects. Knowledge is logically prior to both the knower and the known.

Nature or not-self is essential to the self. Self has to abrogate itself in order to appreciate itself; it has to wander in a world alien to itself in order to come to itself again. Nature is in a way a foreign land in which the spirit wanders to come to a fuller realization of itself. Therefore, both for self-consciousness and self-realization, Nature, an 'other' or not-self is necessary for self.

Not only thought evolves according to 'dialectical movement', things also do so, for things are only thought externalized. Every state of affairs contains contradiction which evolution must resolve by reconciling in a higher synthesis.

As has already been said Reality is thought and therefore, the universe is only a display of the laws of thought, of manifestation of the evolving mind. Kant confines the categories of thought to human understanding; Hegel universalizes them and makes them the categories of the cosmos. Since Reality is conscious reason, the categories are not only forms of thought, but also modes of being. To Hegel, evolution is only self-expression, self-manifestation, or projection of thought. Thought evolves in hierarchical grades.

Nature, mind, society, art, religion and philosophy are some of the ways in which the Absolute discovers and realizes itself.

Continuity of Evolution

As the universe is only a display of the laws of Thought, there is continuity between one logical category and another. Evolution follows the laws of Logic. There is no discontinuity between one form of reality and another.

Thought is evolving from one-grade to another, and the Process continues till we reach the highest Thought, the Absolute. There are, according to Hegel, no surprising new elements or emergents in evolution. Hegel does not beleive in the emergence of a

ew principle, discontinous with the preceding
tage. Every higher stage is simply the fulfil-
ient or realization of the lower.

He traces the various stages of evolution
the case of Nature, and mind. In Nature,
iree stages can be easilymarked. In the first
age, the Absolute Idea is in its unconscious
age; evolution at this stage is a mechanical
id unconscious process of development.

The second stage is what Hegel calls
iemism. Chemism is an inner transfor-
ation, a change not only of place but of
sence. Nothing in the original flow
sembles individuality; nothing is stable,
ed or concentrated. Nature, however,
urns into itself later. The chemical process
urns into itself at a certain point and forms
se centralized wholes which we call orga-
ms, living beings, Plants and animals are
veloped and finally in the human organism,
Creative Idea is reflected in its fulness.

The absolute Idea is in an unconcious
ge in the inorganic world, in what Hegel
ls mechanism; it slowly becomes conscious
lants and animals, and finally it becomes
-conscious in man.

There is also the evolution of mind. Th first stage is what Hegel calls subjective min or the individual. The individual in the stat of nature is governed by blind instinct, b brutal passion· As reason develops, he recognizes others as his equals; he begins to fee that others must have freedom like himself.

Thus is evolved the second stage whic Hegel calls the objective mind or society. Th objective mind first expresses itself in th form of right or law. The individual who i recognised as free is no longer a mere indiv dual but a *person*, and now comes int expression that which we call morality. La has only an external compulsion. It is onl a 'must'. Morality has an inner compulsio It is an 'ought'.

We also find other stages of developme of the objective mind in the family, civ society, and the state:

The first stage of the evolution of min is the subjective mind, the second is objecti mind, and the third is what Hegel calls t absolute mind.

The state is not the highest goal towar which the evolution of the Idea tends. Mi finds its fullest expression and satisfaction in the realm of science, art, religion and philosophy.

Man was first of all merely an individual (subjective mind), confined to his own wants and desires, then recognizing himself in other men, he formed a community, society and state (the objective mind), and finally returning into himself, he finds his fullest expression in the ideal of art or the beautiful, in the religions ideal or God, in the philosophical ideal or truth; he now becomes what Hegel calls absolute mind.

According to Hegel, evolution is teleological. In it the ends or purposes of universal reason are realized. By his teleological conception, Hegel means to show that a complete identity is brought about between the objects and the end. There is a hierarchy of ends, for the lower ends becomes a means to the higher. The final end is the Absolute Idea in which all the lower ends are synthesized.

Hegel emphasizes the importance of ntegration in evolution. The lower stages are so completely integrated with the higher hat they lose their identity in the higher.

Evolution of the Absolute Idea means that the Absolute after a series of self-unfoldment returns to itself.

A Critical Estimate of Hegel's Theory

Hegel was one of the greatest thinkers of the world. He made a few definite contributions to philosophy which deserve special attention. These may be said to be the following :

1) The whole is more than the sum of the parts and is logically prior to them.

2) Thought has a negative element in its movement.

3) Reality is not something static but it is a living, dynamic process.

7) The dialectic movement of thought is from thesis to antithesis and then to synthesis.

There are, however, certain short-comings in his philosophy which may be breifly mentioned.

1) His philosophy is the deification or apotheosis of Thought or Reason, and he takes thought or reason in the sense in which we

find it in man. The absolute Idea or Thought, according to his philosophy, is a magnified form of hnman thought. His philosophy is over-intellectual. Intellect or Reason has been singled out as the main function of consciousness which is said to evolve the whole of reality. But is intellect the sole expression of consciousness?

It has been pointed out by Bradley that thought necessarily involves quality, the distinction between knowing and its object. The will also involves the duality of striving and its end; nor can one think of a self without a not-self. The absolute unity cannot, therefore, be a thought or even a self as we know it in man.

2) The dialectic method is inadequate to many problems of life. Take, for instance, the problem of freedom. Is man free or determined? The antinomy between freedom and determinism may be resolved by the Hegelian dialectic into limited freedom. But what is limited freedom? We are either free or not free. Again it is not clear as to how limited freedom can be evolved as a synthesis of full freedom and no freedom.

3) The essential feature of evolution according to Hegel, is continuity. There i no discontinuity anywhere. But great thinkers like Bergson, Lloyd Morgan, and Alexander have shown that evolution brings fort novelties, surprises, emergents, unpredictabl upsurges which are not a continuation of th old or preceding but something new. Life i not simply a continuation of matter; nor i mind simply a continuation of life.

Smuts' theory of evolution

General J.C. Smuts developed what is known as holistic theory of evolution. Holism is derived from the Greek word 'holos' which means 'whole'. According to Smuts, holism means 'the ultimate, synthetic ordering, organizing, regulative activity in the universe which accounts for all structural groupings and synthesis in it, from the atom to the physico-chemical structures, through the cell and organisms, through Mind in animals, to Personality in man'[9] Holism is the tendency in the universe to the creation of greater and more organised wholes.

Every whole whether it be an atom or human personality has an appropriate plan which the parts serve. Matter, life, and mind are progressivly higher wholes culminating in the highest whole kown as personality. A 'thing' is not merely its visible or sensible part; it is also its insensible 'field'. As Smuts puts it, "Things, ideas, animals, plants, persons, all these, like physical forces, have their fields and but for their fields they would be unintelligible, their activities would be impossible, and their relations barren and futile"[10]

A whole is not simply the aggregate of its parts; it is more than its parts. It is a synthesis of the parts. Synthesis is the fundamental point in the concept of the whole. Smuts says, "It is a complex of parts, but so close and intimate, so united that the characters and relations and activities of the parts are affected and changed by the synthesis"[11]

Evolution is a creative process which is guided by the holistic nisus. At every stage, there is a novelty or emergent.

A Certical Estimate of Smuts' Theory

1, Smuts' holistic schème of evolution is naturalistic. According to him, 'holism' is an active force of nature. It is difficult to see how from mere atoms or matter such novalties as life, mind, and personality emerge. If life and mind are not already involved in matter, no amount of hocus–pocus on the part of holism can bring them forth out of it.

2· Smuts is not prepared to accept that mind is already involved in matter, because he says that mind appears at the end and not at the beginning and takes the idealistic thinkers to task for affirming the primacy of mind, when it appears so late on the scene, but he forgets that when the idealist affirms the primacy of mind, he does not mean the mind of this or that individual, but the surpreme mind which is dynamic, creative.

Surely the supreme reality cannot be described in terms of mind or personality as we know it in man, but there may be a higher consciousness which is the supreme reality.

3. Smuts has not shown the relation of the different classes of wholes to one another.

Whitehead's thought has rightly been characterized as the philosophy of organism. The central idea of organism is that nothing in the world is isolated and that everything is linked with everything. The world is an organism, so everything is related to everything. The world is, so to speak, a multicellular organism.

The world is an organic process of becoming in which changes are going on continually, but the world is not only a world of process but also of stability. Process requires stability. Stability comes from what Whitehead calls 'eternal objects'. The 'eternal objects' are universals which give form to the actual entities. They do so by an act of ingression or penetration into the world of actual entities. These eternal objects are something like Plato's Ideas, with this difference that whereas for Plato, the Ideas are substantial realities, for Whitehead, eternal objects are qualities or patterns of qualities which by ingression into events confer upon them stability. Eternal objects are possibilities or potentialities which make an 'ingression' into actualities. An actual event is the meeting place of possibilities and actualities. The eternal objects are eternal in timeless being; they do not perish even when everything else perishes

What is the agency that brings about the ingression of the eternal objects into actualities? Whitehead says this agency is God. There are, according to him, two Gods, the primordial God and the consequent God. The primordial God is the realization of the potentialities inherent in the eternal objects. The eternal objects have first an ideal concretion in the non-temporal primordial God and are then ingressed into the world of actualities. Apart from God, the eternal objects can never realize themselves in actualities.

The consequent God is immanent in the world. God is not only immanent in the world but is also the end or goal towards which the cosmos is evolving. God plays a double role. It is He who brings about the ingression of the 'eternal objects' into actual entities and it is again He towards whom the evolutionary process of the world is moving. God also evolves along with the evolving universe. The primodial God is static, the consequent God is dynamic. The goal of cosmic evolution is the spiritualization of the world.

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Why does the world evolve at all ? It is because of creativity. Creativity is the urge for creation, for novelty. Whitehead says, "Creativity is without a character of its own in exactly the same sense in which the Aristotelian 'matter' is without a character of its own. It is that ultimate notion of the highest generality at the base of actuality. It cannot be characterized, because all characters are more special than itself. But creativity is always found under conditions and described as condition"[12]. Creativity is pure, formless activity. The purely indeterminate creativity s turned into determinate freedom by the principle of limitation which is God. God is he primordial, non–temporal accident of reativity. We have already seen that accor-ing to Whitehead there are two Gods, the rimordial and the consequent. The primor-ial God is the source and the consequent God is the goal of the evolution of the uni-erse. God is not the cause of the world in ne usual sense. He is the 'logical prius' of ne world.

Critical Estimate of Whitehead's Philosophy

1. Whitehead's philosophy of evolution

is unsatisfactory. Creativity which seems t be the fundamental reality is unconscious an God its first accident is also unconscious. A unconscious God cannot bring about th evolution of the world. nor can the consequen God, for He is Himself changing and evolvin along with the world. Dr. Radhakrishna rightly says, “It is difficult to conceive wha this ultimate creativity which is said to b pure indetermination without any characte of its own is. What is the source of limitatio which turns this purely indeterminate creativity into a determinate freedom ? Since Go is only one of the accidents, He cannot b regarded as the source of the accident itself. He cannot be both the cause and the effect. Unless the ultimate reality is conceived in more satisfactory terms, on the lines of the Absolute mind which has ideal being and free creativity as its features, it becomes a mere logical abstraction ”[13].

2. There does not seem to be any underlying unity among the various principles enunciated by Whitehead, viz., actual entities, etertnal objects, transcendental God, immanent and consequent God and the world.

Without an Absolute, it is difficult to find a unifying, underlying principle,

3. Whitehead's philosophy of evolution is naturalistic. It envisages evolution from the standpoint of the begining. The higher processes are interpreted by him in terms of the lower.

Summary of the Western Philosophy of Evolution

We have seen the main trends of thought regarding evolution in Western philosophy. We may now sum up the salient features of these trends of thought.

1. Western philosophy has emphasized the evolution of the species and the cosmos rather than that of the individual.

2. According to the biological thinkers, volution means adaptation of the species to he environment. They have, therefore, mphasized the evolution of the structure and unction of the organism. If the organism is o evolved as to ensure a better living, the ask of evolution is finished. Life is the goal f evolution according to these thinkers. Mind comes in only in the service of life.

3. According to most of the Western thinkers, evolution is naturalistic. It is Nature that brings about evolution. God or Spirit is not needed; it is Nature that does the trick. For Bergson, it is the elan vital but Bergson is not clear whether his elan vital is a spiritual principle or only a vitalistic principle. From the general trend of his thought, it appears to be only a vitalistic principle. For Alexander, it is the mysterious Space-time that brings about the gigantic pageantry of matter, life, and mind like the magician's hat that brings forth rats from nowhere. And Space-time is frankly non-spiritual.

Smuts' holism is an active force of nature. So evolution is naturalistic according to him also. For Whitehead, it is characterless, abstract, unconscious creativity which has an urge to create that flings open its flood-gates and brings forth God, matter, life and mind. That creativity is unconscious and has yet an *urge* to create is evidently a contradiction in terms.

Hegel alone of all these thinkers thinks that it is the Absolute that is the *fons et origo* of evolution, but the Absolute according to him is Idea, Thought or Reason – which is only a magnified form of human thought or reason.

4. According to all these thinkers, man s the highest and final term of evolution. With his emergence, the goal of evolution has been accomplished. Alexander speaks of the evolution of angels as the next deity. What hese angels will be–we do not know, but at any rate, they will be different from man. The evolution of man is final and complete.

II

EVOLUTION ACCORDING TO INDIAN PHILOSOPHY

It may be said at the outset that Indian philosophy has concentrated itself on the evolution of the individual and has very little to say obout the evolution of the species, and cosmic evolution.

There are many systems of Indian philosophy. It will not be possible, in a brief lecture, to give the view of each system of Indian philosophy regarding evolution. We shall only touch upon some of the most prominent systems and see what they have to say about evolution.

The earliest clear-cut expression that we have of the conception of evolution is in the Aitereyāraṇyaka. It run thus :

" ओषधिवनस्पतयो यच्च किञ्च प्राणभृत् स आत्मानमाविस्तरां वेद । ओषधिवनस्पतिषु रसो दृश्यते । चित्तं प्राणभृत्सु । प्राणभृत्सु त्वेवाविस्तरमात्मा । तेषु हि रसोऽपि दृश्यते । न चित्तमितरेषु । पुरुषे त्वेवाविस्तरमात्मा । स हि प्रज्ञानेन सम्पन्नतमः । विज्ञातं वदति ।

ज्ञातं पश्यति । वेद श्वस्तनम् । वेद लोकालोकौ । मर्त्येनामृत-
प्सति । एवं सम्पन्नः । अथेतरेषां पशूनामशनापिपासे एवाभि-
ज्ञानम् । न विज्ञातं वदन्ति न विज्ञातं पश्यन्ति । न विदुः
स्तनम् । न लोकालोकौ । त एतावन्तो भवन्ति । यथाप्रज्ञं हि
भवाः ” [14]

“Herbs and trees and all that bears life,
e knows as the self in manifestation. In
erbs and trees, *rasa* (sap, life) is seen, and
ind in them that have *prāṇa*. In them that
ave *prāṇa*, the Atman is (more) manifest.
them, *rasa* also is seen, while mind is not
en in the others. In man, the Self is (most)
anifest; he is most supplied with knowledge.
e speaks that which he knows; he sees that
ich he knows; he knows what occurred
sterday; he knows the visible and the invisi-
e; by the mortal, he desires the immortal.
us furnished is he. But of the others,
imals, hunger and thirst are the only know-
ge. They speak not the known; they see
t the known; they know not what belongs
yesterday, nor the visible and the invisible,
ey have only the consciousness of the
nger and thirst of the moment (the physi-
needs). According to the knowledge are
births.”

The important Araṇyakas were, even o a most modest estimate, composed in abou 1000 B. C. It is amazing to find that in suc an ancient past, our thinkers had such a clea vision of the various stages of evolution.

Sāyaṇa in his commentary on this passag remarks:

" सच्चिदानन्दरूपस्य जगत्कारणस्य परमात्मनः कार्यभूताः सर्वेऽ
पदार्था आविर्भावोपाधयः। तत्राचेतनेषु मृत्पाषाणादिषु सत्तामात्रमा
विर्भवति न चात्मनो जीवरूपत्वम् "

"Saccidānanda is the source of all object in the world, and they become the media o his gradual manifestation. In the inconscient clay and stone, there is manifestation only o existence (sattāmatram), not life". Then as the Aitareyāraṇyaka puts it, there is the manifestation of life. After this, there is the evolution of *citta* or mind among living beings. In man, one more characteristic of evolution comes into prominence. Other animals only know, but man also knows that he knows i. e., he has self-consciousness. To put it briefly, consciousness is asleep in the mineral kingdom; it dreams in the vegetable kingdom; it awakes in the animal kingdom; it becomes self-aware in man.

The Upaniṣads

The Upaniṣads are the final phase of the Vedas. Hence they are known as Vedānta. If one wants to know the real teachings of Vedānta, one should closely study the Upaniṣadic texts, and put aside the commentaries of the *ācāryas*. In the Upaniṣads or Vedānta as they are otherwise called, we have a very clear and systematic account of the evolution of man.

The following are the main features of he Upaniṣadic philosophy of the evolution f man :

1. Everything — matter, life, mind — is erived from Brahman or the Absolute. It s Brahman that first involves itself into maer, and then gradually evolves all its characeristics.

2. The main interest of the Upaniṣads is entred in man and it is, therefore, the evoluon of man that has been described in detail. n this connexion, the following points have een emphasized.

a) The complex constitution of man.

b) The goal of man's evolution.

c) Rebirth· Man cannot evolve fu
in one life. It is after a series of rebirths th
he reaches the goal of evolution.

We shall now take these up in son
detail.

1. The Upaniṣads maintain that ever
thing is Brahman. "Sarvam Khlavida
Brahm"— All this verily is Brahman. Th
ever-recurring refrain of the entire song
the Upaniṣads is that all manifestation is th
of the Brahman, that all that was, all that i
all that ever shall be Brahman. A few stra
quotations will suffice.

"तद्यथा रथनाभौ च रथनेमौ चाराः सर्वे समर्पिताः एवमेवा
स्मिन्नात्मनि सर्वाणि भूतानि सर्वे देवाः सर्वे लोकाः सर्वे प्राणाः सर्वे ए
आत्मानः समर्पिताः ।[16]

"As all the spokes are held together i
the hub and felly of a wheel, even so in thi
self all things, all gods, all worlds, all brea
thing beings, all these selves are held together.

"यतो वा इमानि भूतानि जायन्ते । येन जातानि जीव
यत्प्रयन्त्यभिसंविशन्ति तद्विजिज्ञासस्व । तद्ब्रह्मेति "[16]

"That verily, from which beings here ar
born, that by which when born they live, tha

into which on deceasing they enter — that desire to know. That is Brahman."

"ऊर्ध्वमूलोऽर्वाकशाख एषोऽश्वत्थः सनातनः ।
तदेव शुक्रं तद् ब्रह्म तदेवामृतमुच्यते ।
तस्मिंल्लोकाः श्रिताः सर्वे तदु नात्येति कश्चन "[17]

"There is the eternal fig-tree whose roots are upward, and branches downward. That indeed is pure. That is Brahman. That indeed is called the immortal. All the worlds rest on that No one ever goes beyond it".

"यस्मिन्द्यौः पृथिवी चान्तरिक्षमोतं
मनः सह प्राणैश्च सर्वैः ।
तमेवैकं जानथ आत्मानमन्या
वाचो विमुञ्चथामृतस्यैष सेतुः ॥ "[18]

"He on whom the sky, the earth, and the tmosphere are woven, and the mind, together vith all the *Prāṇas*, Him alone know as the tman. Give up all other talk. He is the ridge to immortality".

There are many passages in the Upanisads eclaring that everything is derived from rahman, and Brahman is involved in every anifestation. It is Brahman that is matter; is Brahman that is life; it is Brahman that mind. Evolution makes explicit what is lready implicit. If life and mind were not already involved in matter no amount o nisus or evolutionary urge could bring them out. This is an important point of the Upaniṣadic conception of evolution. Brahman according to the Upaniṣads is the dynami Absolute which manifests and sustains th universe; It is not still Being from which Becoming is eschewed. As Dr. Radhakrishnan puts it, "If a logical account is permitted, then we may say that the Brahman o the Upaniṣads is no metaphysical abstraction no indeterminate identity, no void of silence It is the fullest and the most real being, It is a living dynamic spirit, the source and container of the infinitely varied forms of reality"[19]

Involution of Brahman into matter is *pravṛtti* forth-going, evolution is *nivṛtti* – gradual return to itself; involution is *tirobhāva* – self-concealmet, evolution is *āvirbhāva* – self – revelation.

The first point that the Upaniṣads emphasize is that the Brahman is involved in the world; his powers – life, mind etc. become patent in evolution only because they are already latent.

I have already mentioned that the main interest of the Upaniṣads, in fact of all sys-tems of Indian philosophy, – is centred in the evolution of man. In order to understand he Upaniṣadic philosophy of man's evolution, ve shall have to understand the constitution of man which has been elaborately described by the Upaniṣads.

2 (a) Adccoring to Western philosophy, man is a mind – body complex, a psycho – omatic organism. He has a physical body nd an inner mind. That is all. Accor-ing to the Upaniṣads, man is a very complex eing. He has a physical sheath which is alled the (1) *annamaya – kośa*; he has an ner life – sheath, called the (2) *prāṇama-akośa*. Next in order is the (3) *manoma-kośa*, the sheath of the lower, concrete ind. Beyond that is the (4) *Vijñana-ayakośa*, the sheath of the higher mind. The ext in order is the (5) *ānandamayakośa* or e bliss-sheath. Then comes the (6) *hiraṇ-ayakośa* described by the Mundaka Upa-ṣad. Finally, there is the (7) *daharakośa* *daharākāśa* in which resides the *pratyagātmā* e. Brahman as the self, a spark of the divine me.

Such is the constitution of man. The self is encased in seven sheaths.

The Brahman, according to the Upaniṣads has three irreducible, fundamental aspects, viz., *Sat*, *cit* and *ānanda*. It is a well-known fact that for the manifestation of any power, there should be an appropriate *upādhi* or medium. For instance, for the manifestation of any power of speech, there should be a vocal organ.

We have the higher self and the lower self. The higher self is *Sat*, *cit* and *ānanda*; the lower self is the reflection of the higher. *Cit* is reflected in the lower as *jñāna.śakti*, *ānanda* is reflected as *icchā-śakti* and *sat* as *kriyā-sakti*. For the expression of *Cit*, the medium is *vijñānamayakośa*, for the expression of *ānanda* it is *ānandamayakośa*; for the expression of *Sat*, it is *hiraṇmayakośa*. Similarly, in the lower self, for the expression of *jñānaśakti*, it is *manomayakośa*; for the expression of *icchā-śakthi*, it is *prāṇamayakośa*, and for the expression of *kriyā-śakthi*, it is *annamayakośa*, or the physical body.

The evolution of man consists in the development of all these powers, and equally ne refinement and purification of the various *ośas* which are the media of the expression f these powers.

Man has to learn to control his various odies or sheaths so that they may become ficient media for the expression of his various owers. His evolution consists in *using* the rious bodies for the expression of his latent wers. and not being used by them, in coming their *master* and not their slave.

Man has to function in many environents, called *lokas*, and for being able to nction successfully in each *loka*, he has been ovided with appropriate medium or body. r functioning successfully in *bhūloka*, he has en provided with *annamayakośa*; for functiog successfully in *bhuvar-loka*, he has been vided with *prāṇamayakośa*; for functioning cessfully in *svar-loka*, he has been provided h *manomayakośa*, and so on.

(b) The goal of evolution for man is to ome consciously what he really is, viz., hman, and for this he has to develop all powers. When he has unfolded all the ne powers that are infolded in him, his ution will be completed.

(c) The Upaniṣads and for that mat all the systems of Indian philosophy belie that the evolution of a man cannot be co plete in one life. He has to acquire vario experiences in many births. It is not only t bodily form that matters; it is the indwelli life that has to evolve. In order that the should be continuity of the indwelling li man has to pass through many births rationale of rebirth is beyond the scope of th paper. For Indian philosophy, it is not matter of theory but a fact of experience. T Upaniṣads maintain that rebirth is a necessa condition for the complex evolution of a ma

Man's evolution continues even in th post mortem condition. At death, it is on the *annamayakośa* or the physical body that dissolved. The soul passes to other worlds the other sheaths and after garnering exper ence on the various planes of experienc returns to the physical plane to gather fres experience and evolve. So far only *manomaya*-*kośa* has been evolved in man. Only a fe exceptional, individuals so far have been act vely using the *vijñānamayakośa*, *ānandamaya*-*kośa* etc. It is the destiny of man to develo ll his faculties. When he has realised his ssential divinity, his evolution is complete nd he does not return to this planet any iore.

Man evolves by developing *viveka* and *airāgya* by developing certain essential moral ualities and by aspiration (*mumukṣutva*).

volution according to the Gītā

Like the Upaniṣads, the Gītā emphasizes ie evolution of man, but it also throws hints oout cosmic evolution.

According to the Gītā, the Supreme eality is Puruṣottama. He is both transcen- ent and dynamic. He contains within Him- lf both Akṣara and kṣara, the immutable ing and the dynamic becoming.

He has two aspects, the parā prakṛti and arā prakṛti. The parā prakṛti reveals His preme nature (prakṛtim me parām). It is s originating Śakti. As Śrī Kṛṣṇa puts it :

"अहं कृत्स्नस्य जगतः प्रभवः प्रलयस्तथा" (viii, 6)

rom me, the entire universe originates and me it finally dissolves.) The aparā prakṛti lower nature is derived from his parā

prakṛti. Prakṛti is His own Sakti and no
separate principle as in Sānkhya. *Manas*
mind, *buddhi* or the intuitive faculty, ahaṁk
or the ego, the subtle and gross substan
constitute His aparā prakṛti, his lower
inferior nature. After describing His ap
prakṛti, Śrī Kṛṣṇa says :

"प्रकृतिं विद्धि मे पराम्। जीवभूतां महाबाहो ययेदं
जगत्" (vii, 5)

But know my other Nature which is
Supreme Nature, which becomes the Jīva a
by which the world is upheld." Jīva is
essential divine within us. The aparā prak
is due to the involution of the parā prakṛti
it. Evolution means the transformation
the lower nature into the higher. This
possible by doing action without āsakti
attachment, by complete self-surrender a
by the realization of one's divinity.

Evolution according to Sāṅkya

Saṅkya is avowedly dualistic. The t
realities, according to Saṅkya are Puruṣa a
Prakṛti. The 11th verse of Saṅkya-kāri

describes their characteristics in the following way :

> त्रिगुणमविवेकि विषयः सामान्यमचेतनम्प्रसवधर्मि
> व्यक्तं, तथा प्रधानं, तद्विपवीतस्तथा च पुमान् ॥

Pradhāna in the manifested state like any ther manifested object, is composed of three uṇas (satva, rajas and tamas) is non-discrimi- ated or inseparable from the three gunas, isaya or object of the senses, sāmānyam i. e. ommon object of cognition for all, non- onscious, and productive. The Puruṣa, hough similar in certain respects, is the everse of these."

Prakṛti being unconscious cannot evolve y itself. Only when a conscious being or uruṣa takes interest in it does Prakṛti evolve. rakṛti does not evolve *for* itself. It evolves or the sake of the Puruṣa, for his experience nd *mokṣa* or ultimate release. Evolution, ccording to Sāṅkhya, is teleological, though is unconscious teleology.

he Pariṇama or evolution of Prakṛti

All the psychic and physical factors are atent in Prakṛti. They cecome patent in evolution. The first evolute of Prakṛti is Mahat. It has a predominance of *sattva.* Mahat is the consciousness of the collective Ego. The next evolute is the *Ahaṁkāratattva.* It is the I-making principle. It is at this stage that the idea of individuality arises in the Puruṣas.

In the next stage, evolution is dichotomous. On the one hand, from the Ahaṁkāra tattva evolve the indriyas or sense— capacities and *manas*, and on the other the *tanmātras* or potentials of the gross physical world. From the *tanmātras* arises gross matter. Matter exists in five states, viz., 1) solid (kṣiti) 2) liquid (āpaḥ) 3) luminous (tejas) 4) gaseous (vāyu) 5) space (ākāśa). These states are called the five *mahābhūtas.* Akāsa is the subtlest *mahābhūta.* Every succeeding mahābhūta has the qualities of the preceding ones in addition to its own.

All the evolutes lie in a latent form in Prakṛti or the Primal Energy. According to Sāṅkhya, production only means making the implicit explicit. The effect pre-exists in the cause.

The Puruṣa is enveloped in the Subtle and gross evolutes. He himself is *niṣkriya* i. e.

active and *udāsinā* i. e. indifferent to the
rious objects of the world. Because of his
iveka, the Puraṣa identifies himself with
uddhi and acquires an attchment to the ob-
cts of the world and thus undergoes suffe-
ng. Ignorance is the cause of suffering.
reedom from suffering is to be obtained by
eans of *viveka* which in Sāṅkhya means sepa-
tion from Prakṛti. The real nature of
uruṣa is pure consciousness, completely dis-
nct from the mind-body complex. Aviveka
eans non-discrimination between the self
d not-self, the product of Prakṛti. Viveka
eans a clear realization of the distinction
tween the two and the separation of the
uruṣa from Prakṛti. When the Puruṣa
alizes his essential nature, he is no longer
tangled in Prakṛti. He acquires liberation
mokṣa or *apavarga*. Viveka is not merely
tellectual; it is the outcome of moral and
iritual discipline.

An estimate of the Sāṅkhya theory

1) If the Puruṣa and Prakṛti are two
tally disparate realities, their co-operation
r a common purpose is not intelligible. It

does not stand to reason that the insentient Prakṛti can have any purpose at all. Unconscious teleology is a contradiction in terms. The analogy of the flow of milk from the cow's udder for the nourishment of the calf given by Sāṅkhya is entirely fallacious, for the milk flows from the cow's udder not of itself, but because of the cow's love for the calf.

2) That the insentient Prakṛti requires a sentient experiencer or Puruṣa implies that an object suggests a subject. This goes against the fundametal dualism of Saṅkhya.

3) When what is evolved seems to be a different entity altogether, it is known as *tattvāntara pariṇāma*. An instance in point is the evolution of *tanmātras* from *ahaṅkara*. This resembles emergent evolution of modern philosophy, but Sānkhya does not make it clear whether the emergent is due to the puruṣa or is entirely the product of prakṛti. According to the Sāṅkhyan principle, it cannot be due to the Puruṣa, for the Puruṣa is inactive. It can only be the product of *prakṛti*, but it has not been explained how *prakṛti* brings about an emergent, different from the preceding cause.

4) Sāṅkhya maintains that originally Pra-
ṛti is in *sāmyāvasthā* or a state of equipoise.
t is on account of the transcendental influence
f the Puruṣa that the initial equipoise of
rakṛti is disturbed, and evolution starts.
rakṛti is entirely disparate from Puruṣa.
ṅkhya has not made it clear as to why the
sparate Prakṛti should start evolving
ving to the gaze of the Puruṣa. If it is said
at Prakṛti does so for the experience and
eration of Puruṣa, two difficulties arise.
rstly, how can unconscious Prakṛti have any
rpose? Secondly, why should Prakṛti evolve
r the sake of one who is wholly and soley
another?

5) Puruṣa and prakṛti are wholly opposed
alities and yet they become loving partners
the game of life; they co-operate beautifully
the progression of evolution. This is not
ssible without an underlying unity. Dr.
dhakrishnan rightly remarks, "The wonder-
way in which they help each other shows
at the opposites fall within a whole. The
nsparent duality rests upon some unity
ove itself."[20]

Evolution according to Śaṁkara Vedānta

Śaṁkara is one of the acutest thinkers o the world. He has developed a grand, architectonic philosophy. Here we are only concerned with evolution as conceived by Śaṁkara.

Brahman according to him is pure Being transcendent to the world. Its power to creat the world is known as Māyā. Brahman as th ultimate reality is indeterminate or *nirguṇa*; i association with Māyā, it becomes *saguṇa* o determinate and is known as *Īśvara*. It i Īśvara who in association with Māyā is responsible for the evolution of the world. Māyā i *anādi* but *śānta* i. e., it is beginningless but ca be sublated. It is positive but illusory. Māy like Prakṛti of Sāṅkhya is creative, but it i different from the Prakṛti of Sāṇkhya. Prakṛt is an independent reality; Māyā is dependen on Īśvara. It is, however, *triguṇatmikā*, consisting of three *guṇas* like Prakṛti. Māyā ha the double power of *āvaraṇa* or concealmen of reality and *vikṣepa* or distortion of realit into something else. Brahman is static. I cannot change. The world is, therefore, onl his *vivarta* or illusory appearance.

According to Śaṁkara Vedānta, the evolution of the world arises in the following vay. At first there arise the five subtle lements—*ākāśa* (ether), *vāyu* (air), *agni* (fire), *ipaḥ* (water), *Kṣiti* (earth). These are mixed p in five different ways to produce five gross lements. Gross *ākāsa* is produced by the ombination of the five subtle elements in the ollowing proportion—$\frac{1}{2}$ *ākāśa* $+ \frac{1}{8}$ *vāyu* $+ \frac{1}{8}$ *agni* $+ \frac{1}{8}$ *āpaḥ* $+ \frac{1}{8}$ *kṣiti*. The other gross elements re similarly produced by the combination of ne subtle elements in the proportion of half f that element and one-eighth of each of the ther four. This is known as *pañcīkaraṇa* or ne combination of the five. The subtle body f each *jīva* or soul is made up of the unmixed ibtle elements, and the gross body of the oss elements. The gross objects of Nature e also made up of the gross elements. *Akāśa* anifests sound; *vāyu* manifests sound and uch; *agni* manifests sound, touch and form; *paḥ* manifests sound, touch, form and taste; *ṣiti* manifests sound, touch, form, taste and nell.

The *jīva* is enveloped in subtle and gross odies. The *jīva* or soul suffers the experience f Saṁsāra owing to the identification of the *ātman* or self which is essential by Brahman wit his bodies. This identification is due to *avidy* or primal ignorance. When the realizatio dawns on him that he is essentially Brahma and his identification with his bodies cease he becomes liberated. Śravaṇa or study of th upaniṣadic texts like 'tattvamasi' or 'that a thou', *manana* or convincing oneself by argu ments in favour of the upaniṣadic truth, an *nididhyāsana* or meditation on the truths inte lectually accepted aid in the realization one's essential nature as Brahman, but it ultimately this realization which brings abou liberation.

The ideal of *advaita* or non-dualist Vedanta is the realization of one's essenti nature as Brahman, and shedding away eve trace of Māyā. It is achieved after man repeated births. Once it is achieved, there no longer rebirth.

An estimate of Śaṁkara's Theory

The main trouble with Śaṁkara was tha of change. He believes that change Brahman or fundamental Reality would affe its essence. Without change, evolution wou ot be possible. He admits evolution of a sort empirical reality, but he maintains that this only a magic show brought about by Māyā. ut if Māyā is the Śakti of Brahman, then the ange due to Māyā is ultimately due to ahman, for *Śakti* and *Śaktimān*, energy or wer, and the wielder of energy or power nnot be separated.

Śaṁkara's whole trouble is due to the fact at he has taken 'change' in the naturialistic nse. Change really speaking, is to be taken a creative sense according to which novelties, ergents appear without affecting the creative wer.

What would Śaṁkara make of the follow- g verse of Bṛhadāraṇyaka Upaniṣad?

> " पूर्णमदः पूर्णमिदं पूर्णात्पूर्णमुदच्यते ।
> पूर्णस्य पूर्णमादाय पूर्णमेवावशिष्यते ॥ "

(Bṛhadāraṇyaka V 5, 1)

hat is fulness; this is fulness. From fulness th fulness proceed. When fulness is with- awn from fulness, even then fulness itself mains". The word *udacyate* here is almost ancient word for 'evolved'. 'Ut+añe' eans to take out, to make explicit what is plicit. Here the Upaniṣad says that even when the whole is taken from the whole, the whole Reality still remains; it does not undergo any change. In spite of all changes, the Absolute remains unchanged. It is not affected by change. We shall consider this at length in the next lecture.

Evolution according to the Absolutist Śaiva Philosophy

Tne Absolutist Śaiva philosophy has been very little studied, but it is one of the grandest systems of philosophy that the genius of this country gave to the world. It is generally known as the Advaita or non-dualistic. Śaiva philosophy or Trika philosophy or Pratyabhijñā philosophy. Śiva in this philosophy is used in the sense of Reality, not in the sense of one of the gods or the withdrawing aspect of God as it is used in popular Hinduism. It is also called Trika philosophy because of the series of triads used in this system, such as Śiva, the Supreme, Śakti, the power of the Supreme, Nara or manifestation of Śakti. Parā Śakti, the supreme or highest power, Aparā or lower śakti and Parāparā or the mixed etc.

'he nature of Reality according to this philosophy

Ultimate reality in this system is called *nuttara* which means 'that than which there is othing that is higher'. As related to the niverse it is both transcendent or *viśvottīrṇa* nd immanent or *viśvamaya.* Its essential ature is *Cidānanda.* The word *Cit* is difficult o translate. It is relationless sciousness or he unchanging principle of all changes, as Sir ohn Wordroffe has suggested. It is called ther Parā Samvit or Parama Śiva or briefly nly Śiva. It is *prakāśa* or luminous consci-usness. It is not only prakāśa, but also *marśa* which means that it is conscious of its onsciousness i. e it is also self-conscious. It *prakaśa-vimarśamaya* i. e. both *prakāśa* and *marśa.* If it were simply *prakāśa* without *marśa* it would be without any dynamis, ert, powerless. As Parā Prāvesikā puts it, *'adi nirvimarśaḥ syat anīśvaro jadaśca prasa-eta"* (p. 2). This self-surveying is the innate ge to manifest itself. This *vimarśa* is the pression of the innate Self-consciousness of e Supreme in the emanation of the universe, its maintenance and its withdrawal within itself. Parā Prāveśika expresses this idea in the following words.

"Vimarśo nāma viśvākāreṇa, viśvaprakāśena, viśvasaṁharaṇena ca akṛtrimāham iti visphuraṇam" (p. 1–). Parāvāk or the Supreme expressive power, *svātantrya* or absolute freedom for manifestation, *aiśvarya* or power of creativity, kartṛtva or the supernormal, transcendental power of objectifying oneself—the power of self—heterization, *spanda* or potential dynamis are simply synonyms of *vimarśa.*

Vimarśa or awareness in the *Cit* of its existence is known as *Çit-śakti*. *Cit* or *Śiva* and his *vimarśa* i. e. Śakti or *svātantrya* are not two but the same reality in two poises.

Though Śiva has infinite powers, the following are the fundamental ones.

1) Cit or the unchanging principle of all changes. In this form, Cit is Śiva.

2) Ananda — Bliss or delight bursting forth into self-expression, known also as *Svātantrya*, the power to effectuate. This is also known as *Śakti*.

3) Icchā or the Will to manifest. In this form, the Supreme is Sadāśiva.

4) Jñāna or the power to know. In this
rm, he is known as Īśvara.

5) Kriyā, the power to assume any form.
this form, he is *sadvidyā*.

The universe in this system is only a *pra-*
ra or spreading out, an *unmeṣa* or blosso-
ing forth of what is potential or latent in
e Supreme.

volution

Paramaśiva gradually descends into incon-
ient matter. This aspect is the involution
Śiva or *Saṁkoca* of His *Śakti*. The ini-
l *spanda* or the primal stir of the urge to
anifest in parama Śiva is known as Śiva.
e unitive experience of parama Śiva in
ich subject and object were indistinguisha-
one is broken up by Sakti which has a ne-
tiving function (niṣedha-vyāpāpāra-rupā.)
somuch as the objective side of the unitary
f-consciousness is negated, the I-conscious-
ss, to that extent, suffers diminution. The
marśa or the dynamic aspect of Śiva is,
other words, the ānānda aspect which is
l of the joy of self-expression. The *Cit*

and ānanda aspects are simultaneous, not successive.

The object side is withdrawn from th unitary consciousness and is presented to th "I" as "This", though the emphasis is still o "I". The experience of this stage is *ahamidar* i. e., "Ī *am* This" This stage is known as *Sadāśiva* or *Śādākhya tattva.* This may be said t be the first stage of involution. The Will o *icchā* aspect of Śakti is predominant at thi stage.

In the next stage of involution, the 'This aspect becomes more prominent. It is, however, still identified with "I". In this stag *jñāna-sākti* is more prominent. It is know as *Īśvara tattva.*

The next stage of involution is the *Sadvidyā tattva* in which both "I" and "This" ar equally stressed. In this stage, *Kriyā-śakt* is prominent.

So far the process of involution is known a *Śudda Adhvā*, the pure course, for the modification of the original unitive experience i still only in Ideal region. A complete separation of "I" and "This", the subject and objec has not been effected as yet.

In the succeeding stages of involution, there is a growing separation between the "I" and "This" . So these stages are known as *Aśuddha Adhvā* or the impure course. The further involution is brought about by Māyā. The word Māyā is derived from the root 'mā', to measure. This is an aspect of Śakti that measures or limits. It brings about *sankoca* or limitation both in "I" and "This", the subject and the object.

Māyā brings about limitation by means of her five k*ancukas* or cloaks.

1. The *nityatva* or eternality of *cit* is limited into temporal determinaiton by the *Kancuka* of Kāla or Time.

2. The *vyāpakatya* or all-pervasiveness of *ānanda* is limited into Space and the *svatanrya* into causality by the *kancuka* of *niyati* or spacial and causal determination.

3. The *pūrṇatva* or complete realization of *icchā* is limited by the *kancuka of rāga* into desire or a sense of want.

4. The *sarvajñatva* or omniscience of *jñāña* is limited by the k*ancuka* of v*idya* into imited knowledge.

5. The *sarvakartṛtva* or all-doership of *kriyā* is limited by the *kancuka kalā* into limited efficacy.

Thus limited Śiva becomes *puruṣa*, the individual subject, and *Śakti* becomes *prakṛthi*. There is now a complete separation between the subject and object, between *puruṣa and prakṛti*. Hence forward the other *tattvas* come into being as in Sāṅkhya. It should be noted, however, that *puruṣa* and *prakṛti* in Sāṅkhya are two independent, disparate relatives from the very start. In the obsolute Śaiva philosophy, both *puruṣa* and *pṛakṛti* are the limitations of a single untive consciousness. Besides in Sāṅkhya, *prakṛti* is universal and common for all, in the Absolute Śaiva philosophy, each *puruṣa* or individual subject has his own limited *prakṛti*.

The *tattvas* or involutes of Reality in this system may be enumerated as follows:

1. Śiva, 2. Śakti, 3. Sadāśiva, 4. Īśvara, 5. Sad-vidyā or Śuddha vidyā, 6-11) Māyā with the five *kancukas*. 12. Puruṣa 13. Prakṛti, 14. Buddhi, 15. Ahaṁkāra, 16. Manas 17-21. Five powers of perception or *jñānendriyas*, 22-26. Five powers of action or *kar-*

iandriyas, 27-31. Five *tanmātras* or poten-
as, 32-36. Five *mahābhutas* or gross ele-
ents.

The individual *jīva* has *āṇava mala* which
due to the initial *sankoca* or limitation of
ātantrya, *māyīya mala* or the limitation of
is psycho physical adjuncts due to Māyā and
ārma mala or impurity adhering to him due
his *Vāsanas* left behind by actions. This is
ie final picture of the individual brought
oout by the progressive involution of Reality
to limitation.

So far with regard to involution. We may
ow describe the process of evolution. The
llowing grades are indicated in the system
ith regard to the progressive evolution of the
dividual.

1. The normal individual is known as
k*ala*. He has all the three *malas*-k*ārma*,
āyīya and *āṇava*.

2. One who succeeds in removing the
irma mala as known as *pralayā*k*ala*. He has
ll not been able to shed his *māyīya* and
ava mala.

3. One who succeeds in removing both
rma and *māyīya mala* has climed higher up the

ladder of evolution and is known as *Vijñānakala*. He has arisen above *aśuddhamāyā*, but has not yet been able to enter *śuddha vidyā*. He has *jñāna* and *icchā*, but no *kriyā*.

4. Above the *vijnānā*kala is the Mantra experiment. He has shed all the *malas* and is in *śuddha vidyā tattva*. He has a distinct experience of the universe, but the universe is regarded as always related to the Self. He guides the souls struggling in the *sakala* stage.

5. Above this stage is Mantreśvara who is in *Īśvara tattva*. In this stage the universe is experienced as distinct but at the same time identical with the Self i. e., the universe is experienced as an aspect of self-consciousness

6. The next stage is that of the Mantra mahesvara whose experience is of the form "I am this" with the main emphasis on "I" He is in *Sadāśiva tattva*.

7. The highest stage is that of *Śiva-pramātā*. He experiences everything as Śiva This is also known as *pūrṇāhantā* or the complete self-consciousness in which everythin is 'I'; there is no 'This'.

The goal of evolution

The goal of this evolution is not merely *mokṣa* or liberation from the whirligig of birth and rebirth, but *Śivatva*, acquiring the status of *Śiva*, divinisation.

Aids in evolution

There are various means of *sādhanā* or piritual discipline that help in the quick evoution of men. Of these, the following three re generally recommended.

1) *Aṇavopāya*— In this, the body, *prāṇa* nd mind are meant to be purified by certain rescribed methods, viz. worship, ritual ontrol of *praṇa*, meditation etc. It is known s *kriyopāya*, because *kriyā* (worship, ritual tc.) plays the prominent part in this discipline.

2) *Śāktopāya* — This is mostly mental iscipline. It is called *jñānopāya*, because it the mind that is mostly cultivated in this iscipline. The key-formula to be meditated n is "Śivoham—I am Śiva." This is known s *Śudha vikalpa*, pure mentation which after ssolving every other vikalpa or discursive hought disappears itself and thus one acquires

unitive consciousness. This together with *mantra-śakti* which is developed by arduous practice of *japa* brings about the awakening of *kundalinī* from her dormant condition which leads to Self-realization.

3) *Śāmbhavopāya*—This is generally a method of *vicāra* and *dhyāna*, enquiry and meditation. This is the path of 'constant awareness'. One starts with the analysis of *panca-kritya* or the fivefold act of Śiva, *vikalpa kṣaya* or the practice of the dissolution of the *vikalpas*, and ends in the realization of *pūrṇāhantā* or the complete 'I-consciousness' in which there is no 'This', in which the entire universe appears as self or Śiva. This is *icchopāya* i. e. in this, the aspirant attains complete 'I-consciousness' or Śiva-consciousness by exercise of the Will.

The main aim in Śāktopāya and Śāmbhavopāya is the transformation of *Citta* into *Cit*, the individual consciousess into divine consciousness.

A general estimate of the system

This philosophy gives a very clear description of both involution and evolution. Evolu-

on of life, mind etc., is not possible unless
iese are already involved in the inconscient
y the activity of the divine power. This gives
hierarchy or gradation of evolved beings
om mere man or *paśu* into Vijñānākala,
Iantra, Mantreśvara, Mantra-maheśvara and
iva-pramātā.

This is the only philosophy which empha-
cally maintains the possibility of transforma-
on of individual consciousness into divine
nsciousness. According to it, *Citta* or indi-
dual consciousness can be transformed into
it or divine consciousness. According to
her systems of Indian philosophy, *Cttta* may
purified and its power may be greatly
hanced, but it belongs to *prakṛti* or Māyā,
d so cannot be transformed into *Cit* or
vine consciousness.

The goal of evolution according to *Sāṁ-
iya-yoga* and *Śāṁkara-Vedānta* is *kaivalya* or
olation, according to Sāṁkhya-yoga from
akṛti and according to Vedānta from
Iāyā. In other words, it is *viyoga* from the
ienomenal. According to the Absolutist
iiva philosophy, the goal of evolution is not
aivalya, but *Śivatva*, acquiring the status of
va or divinisation, and thus it is not *viyoga*

from the phenomenal, but *yoga* of the phenomenal, the realization of the phenomenal as Śiva.

Like other systems of Indian philosophy, however, the Absolutist Śaiva philosophy also speaks only of the evolution of the individual, and not of cosmic evolution.

Summary

1) All systems of Indian philosophy have
considered evolution only from the point of
view of the individual, and not from the point
of view of the species or from the point o
view of the cosmos.

2) There are hints here and there o
cosmic evolution in the Tantras, but they hav
not been fully developed.

3) All systems of Indian philosoph
excepting that of Cārvāk believe that th
evolution of an individual cannot be complet
in one life. Therefore, rebirth is indispens
ble for evolution. European philosophie
have generally emphasized the evolution
form, but Indian philosophy believes th
merely the evolution of form is meaningle
unless there is also the evolution of the indwe

ing life and cansciousness. There cannot be he continuity of the indwelling life without ebirth.

4) All systems of Indian philosophy elieve that man is a very complex being. He s not simply mind-body as European systems elieve. He has subtler bodies too and subtler spects of mind. All these have to be evolved or his full evolution. They believe that there re other subtler planes of existence than the nere physical plane and man's subtler bodies orrespond to the various subtler planes. His volution, therefore, consists in the purificaion and perfection of his subtler bodies by piritual discipline and by garnering the rich nd varied experiences of all the planes of xistence. They, therefore, maintain that the volution of man continues even in postnortem existence.

5) The goal of evolution in Indian philoophy is in general terms *mokṣa* or liberation rom the round of birth and death, but speciically it is *kaivalya* or complete separation rom Prakṛti in Śāṁkhya-yoga or Māyā in Vedānta. It is to remain in one's essential ature without any adjunct of Prakṛti or Māyā. According to Vaiṣṇavism, the goal is

fellowship with God. According to the Absolutist Śaiva philosophy, it is Śivatva or recapturing one's essential nature as Śiva in which condition everything is Śiva. According to Hīnayāna Budhism, it is Nirvāṇa. According to Mahāyāna Budhism, it is Buddhatva or acquiring the status of the Buddha.

III

EVOLUTION AS CONCEIVED BY SRI AUROBINDO

Aurobindo is a new star that has appeared in the philosophical firmament. His philosophy of evolution combines within itself the best in the thought of the East and the West and also opens up a new vista in this direction. In order to follow his philosophy of evolution, we have first of all to understand the metaphysical background of his thought.

The Metaphysical background of Aurobindo's concept of Evolution :

The absolute Reality according to Aurobindo, is Saccidānanda, i. e., Existence—Consciousness—force—Bliss. Cit, according to Aurobindo, is not simply consciousness but consciousness-power. Consciousness is not merely cognitive. It has a dynamis of its own.

The absolute transcends opposites like Being and Becoming, Stability and Movement, One and Many, the Indeterminate (Nirguṇa) and the Determinate (Saguṇa). That is why it can be both Being and Becoming, One and Many without being lost in any one of these. There are thinkers both in the East and West, according to whom the Absolute is only pure being, Becoming is only false show. Parmenides in Greece, and Śaṁkara in India are typical examples of such thinkers. There are thinkers again both in the East and West according to whom Becoming is the only Reality, Being is only a figment of imagination Heraclitus and Bergson in the West, and Buddhism in the East represent this view Aurobindo believes that these are only half truths. The Absolute includes both, and transcends both. As Aurobindo puts it, "Stability and movment, we must remember, ar only our psychological representations of th Absolute, even as are oneness and multitude The Absolute is beyond stability and movement as it is beyond unity and multiplicity But it takes its eternal poise in the one and th stable and whirls round itself infinitely, inconceivably, securely in the moving and th multitudinous. World-existence is the ecstat dance of Shiva, which multiplies the body he God numberlessly to the view : it leaves hat while existence precisely where and what was, ever is and ever will be; its sole object s the joy of dancing."[21] The obsolute is above he dichotomisations of the mind.

Both Śaṁkara and Aurobindo believe in ssence or Being as the Supreme Reality which ersists through all states and changes, but to aṁkara there is irreconcilable opposition etween Being and Becoming, One and Many. n the very first shot that he fires in the Introuctory portion of his Bhāṣya on the Vedāntaūtras, he maintains that there is an irreconciable opposition between Self and not-Self, etween Subject and Object· He has dug an mpassable gulf between One and Many· Stabiity and Movement, the Infinite and the Finite, he Eternal and Temporal.

Aurobindo does not deny the distinction etween the essential and the phenomenal, ut he holds that the phenomenal is an expresion of Reality, not illusion. The phenomenal s contained in the essential. The many, the inite, the phenomena are not something mposed upon Reality but are the proliferation f Reality itself. This is what Aurobindo has o say on the problem of One and Many.

“Brahman is one. not numerically, but in essence. Numerical oneness would either exclude multiplicity or would be a pluralistic and divisible oneness with the Many as its parts. That is not the unity of Brahman, which can neither be diminished, increased, nor divided.[22]

As has already been said, *cit*, according to Aurobindo is not simply conciousness but consciousness-force or conciousness-power, *cit-Śakti*. Cit is not passive ; it is dynamic. *śakti* is always there both in the dynamic and static state. This is what Aurobindo has to say about it. “Force is inherent in Existence. Shiva and Kāli. Brahman and Shakti are one and not two who are separable. Force inherent in existence may be at rest or it may be in motion, but when it is at rest, it exists none-the-less and is not abolished, diminished or in any way essentially altered” [23].

Power does not emerge in Reality at some point of Time as some inexplicable, strange phenomenon. It is inherent in Reality. Says Aurobindo : “It is impossible, because contradictory of reason, to suppose that Force is a thing alien to the one and inifinite existence and entered into it from out de or was non-existent and arose in it at me point in Time."[24]

Brahman, therefore, is not merely static: is dynamic also. "A solely silent and static finite, an Infinite without an infinite power nd dynamis and energy is inadmissible except the perception of an aspect; a powerless bsolute, an impotent spirit is unthinkable."[25]

The main difficulty of Śaṁkara was that the mind, Being and Becoming, One and Iany, the Eternal and the Temporal appear as ontradictory, and as contradictories both annot be true. If one of them is true, the ther must be false. Being, one and the ternal cannot be said to be false in respect of ne Absolute, so their contradictories, Being, Iany and the Temporal must be false or lusory, *mithyā* or *adhyāsa*. These antinomies ave proved to be a veritable Serbonian bog in hich a whole army of philosophers has sunk. nd Śaṁkara was no exception. At the tellectual level, it is difficult to find a satisctory solution of these antinomies. So aṁkara unceremoniously rules one of the erms viz., Becoming, Many, Temporal etc. ut of court, and retains the other term Being, ne, Eternal etc. But Reality cannot be measured by the three-foot rule of the mind. It is beyond mental categories. But what is contradictory to the human mind is necessarily contradictory for Reality. The Infinite is not bound by the logic of the finite mind. Aurobindo says that there is such a thing as logic of the Infinite. The observations of Aurobindo on this point are so apt and enlightening that they deserve to be quoted in full.

"But, in fact, the cause of this impression must necessarily be sought not in anything illusory or fantastic in the Supreme or the universal self-existence, but in our own inability to seize the supreme clue to its manifold existence or discover the secret plan and pattern of its action. The self-existent is the infinite and its way of being and of action must be the way of the Infinite, but our consciousness is limited, our reason built upon things finite; it is irrational to suppose that a finite consciousness and reason can be a measure of the infinite; this smallness cannot judge that Immensity; this poverty bound to a limited use of its scanty means cannot conceive the opulent management of those riches; an ignorant half knowledge cannot follow the motions of an All-knowledge. Our reasoning is based upon our experience of the finite operations of physical Nature, on an incomplete observation and uncertain understanding of something that acts within limits; it has organised on that basis certain conceptions which it seeks to make general and universal, and whatever contradicts or departs from these conceptions t regards as irrational, false or inexplicable."[26]

Again, "But the being and action of the nfinite must not be, therefore, regarded as if t were a magic void of all reason : there is, on he contrary, a great reason in all the operaions of the infinite, but it is not a mental or ntellectual, it is a spiritual and supramental eason : there is a logic in it, because there are elations and connections infallibly seen and xecuted; what is magic to our finite reason is he logic of the Infinite."[27]

We have to admit with becoming humility hat there is profound mistery about the *modus perandi* of the Absolute by means of which t brings into existence a world in the present orm, that the world as it appears to the finite mind is relative to the psyco-physical constituion of the knower, but that does not mean hat the empirical reality is an illusion.

The Infinite and Finite, Being and Becoming, Eternal and Temporal are only contraries, not contradictories. The Absolute includes all the contraries and transcends them. The word 'Māyā' is derived from the root 'mā' to measure. It is the mysterious power of the Infinite to 'measure out' reality. To deny one of these contrary terms by ruling it out as an illusion brought about by Māyā as Śaṁkara does is to cut the knot, not to offer a solution; it is only an escape.

We need not labour the point any further. Brahman is integral. There is nothing which is outside Brahman. To deny one term of the various contraries is to refuse to see Brahman or the Absolute in its integrality. As Aurobindo puts it "The Infinite is at once an essentiality, a boundless totality and a multitude; all these have to be known in order to know truly the Absolute."[28]

The Absolute as Supermind

We have seen that according to Aurobindo there is no real opposition or incompatibility between the Infinite and Finite, One and

Many, the Eternal and Temporal etc. The
ntimonies do not exist for Reality itself; they
ppear as irreconsilable opposition only to
nite reason. The problem is—How does the
bsolute which is Timeless appear in Time;
ow does Reality which is spaceless manifest
self in space; how does the Infinite assume
initude? Aurobindo's solution of the problem
that it is the Supermind, a wonderful power
f the Absolute that brings about the mani-
estation of the finite from the Infinite. The
upermind is the mediating principle, the link
etween the Timeless and the Temporal,
etween the Infinite and the Finite. Auro-
indo clarifies this point in the following
ords: "Infinite consciousness in its finite
ction can produce only infinite results: to
ettle upon a fixed Truth or order of truths
nd build a world in confirmity with that
hich is fixed, demands a selective faculty of
nowledge commissioned to share finite appea-
ance out of the Infinite Reality."[29]

Aurobindo calls this selective faculty
upermind. He says that the Vedic seers
alled this Māyā. Māyā has been called
rajñā—a wonderful insight and skill in the
gveda. This *prajñā* is the Supermind. Auro-

bindo remarks, “This power was known to the Vedic seers by the name of Māyā. Māyā meant for them the power of infinite consciousness to comprehend, contain in itself and measure out, that is to say, to form—for form is delimitation—Name and Shape out of the vast illimitable Truth of infinite existence.”[30]

The Supermind is not a magnified form of the human mind. It is different from the human mind in quality and power. It is Truth-consciousness, Real-Idea. It is fully aware of the infinite possibilities of Saccidānanda and works them out.

This is what Aurobindo has to say about the Supermind: “The world is, therefore, not a figment of conception in the universal Mind, but a conscious birth of that which is beyond Mind into forms of itself. A Truth of conscious being supports these forms and expresses itself in them, and the knowledge corresponding to the truth thus expressed reigns as a supramental Truth-consciousness organising real ideas in a perfect harmony before they are cast into the mental-vital-material mould.”[3 In a foot-note, Aurobindo adds that Truth consciousness is what is called in Rgveda—*ṛta cit*, which means the consciousness of essentia

ruth of being *(satyam)*, of ordered truth of
ctive being *(ṛtam)* and the vast self-awareness
bṛhat) in which alone this consciousness is
ossible.

The Supermind brings out the infinite
ossibilities of the Absolute into manifesta-
on. The Supermind has three poises and
› three ways of action. These poises are the
omprehending consciousness, the apprehen-
ing consciousness and the projecting con-
ciousness In its poise of comprehending
onsciousness, there is no individualisation.
he multiplicity of forms is still integrated
ith the oneness of Saccidānanda. There
e not seperate existences as yet. In its
oise of apprehending consciousness, the su-
ermind supports the manifestation of the
any from the One. though in itself it is indi-
sible. This is the poise of unity in diver-
y. In the third or projecting poise of con-
iousness, there eppears a distinction between
e One and Many without a sense of division.
ere is still a sense of unity inspite of diver-
y. Even in the third poise, there is no
ose of the Supermind into ignorance.

Involution according to Aurobindo

Evolution, according to Aurobindo, is due to the involution or descent of the spirit into the Inconscient. Evolution is the inverse process of the ascent from the inconscient to the Divine.

There is neither ignorance in Saccidānanda nor in the Supermind, but conscious-force in its descent in manifestatian has to acquire self-limitation. It is this limitation, this partial knowledge that is really ignorance. This ignorance is due to an exclusive concentration of consciousness - force, due to its limitation. Aurobindo says that this limitation is brought about by *tapas*. *Tapas* means the concentration of energy of the consciousness-force upon itself. Tapas or concentration of consciousness-force may be of four types—essential, integral, multiple and separative. The first gives at one end the Super - conscient Silence, and at the other end the material inconscient. The second is the integral Supramental concentration. It has the knowledge of both One and many without any division. The third is the overmental awareness which brings about divergent movements of consciousness. The fourth is the separative movement of consciousness which results in Ignorance.

When the spirit descends from Supermind to Overmind, it begins to acquire limitaion in knowledge. There are many levels of onsciousness between the Supermind and nind, viz., Overmind, Intuition, Illumined Mind and Higher Mind. The consciousness–orce goes on diminishing in knowledge as it lescends in the lower grades, until at last vhen it reaches the level of mind, it assumes gnorance. When it descends into life, it cquires a further diminution in knowledge. Vhen it finaly makes a descent in matter, it is educed to inconscience. Aurobindo says, This is the last stage of the descent of conciousness, an abysmal sleep, a fathomless ance of consciousness which is the profound asis of the action of the material nature"[32] he levels of mind, life and matter are manisted through progressive Ignorance. Matter is onsciousness fallen asleep. Even matter is ot totally unconscious. Aurobindo quotes e Upaniṣadic statement "Annam Brahmeti yajānāt" – Matter also is Brahman.

The order of descent or involution of

Saccidānanda is from Super-mind to mind, life and matter.

Evolution according to Aurobindo :

Evolution is the inverse process of involution. It is from matter to Life, Mind and Supermind. Involution is Self-Oblivion; evolution is Self-discovery; involution is descent from Saccidānanda, evolution is ascent to it; involution is shlf going, evolution is return homewards, involuiton is *tirobhāva*, evolution is *āvirbhāva*; involution is *ātma-gopana*, evolution is *ātmaprakāṣana*; involuation is Self-negation, evolution is Self-affirmation. Involution-evolution is the grand rhythm of the Divine Life; it is the diastole-systole of the heart of Saccidānanda; it is Reality's game of hide and seek.

There is nothing, according to Aurobindo, which is not Brahman. Every atom bears on its bosom the signature of the Supreme ; every cell contains within it the sealed secret message of the Divine. Aurobindo puts it beautifully, "All is a manifestation of That, for it dwells even in all that seem to be its opposites and its hidden compulsion on them to disclose it is the cause of evolution, on Inconscience to develop from itself its secret consciosness, on the apparent Non-Being to reveal in itself the occult spiritual existence, on the insensible neutrality of Matter to develop a various delight of being which must grow, setting itself free from its minor terms, its contrary dualities of pain and pleasure, into the essential delight of existence, the spiritual Ananda."[33]

Evolution, according to Aurobindo, is spiritual. It is the power of the spirt above that can lead life from the dust to Saccidānanda. At is Supramental consciousness that has brought about descent; It is Supramental consciousness above that can bring about ascent. Evolution is not natural selection, as the naturalists believe. It is spiritual throughout.

The Principles of Evolution

Evolution is not haphazard, arbitrary, erratic. It observes a definite method in its onwards march. It follows the triple process of widening, heightening and integration. Firstly, there is the widening process. For example, Matter uudergoes a process of complication, and intricate organization in order that the higher principle of life may be manifested in it. Secondly, it is a heightening process which means that there is an ascent from a lower to a higher grade. For instance when matter has been fairly orgonized, a higher grade of existance, viz., Life is manifested in it. When Life has been fairly evolved, a higher grade of existence, viz., Mind appears. At each step, there is an ascent to a higher form of consciousness. Thirdly, there is the process of integration. This means that when evolution reaches a higher level, the higher takes up the lower grades and *transforms* them according to its own needs and laws; the lower levels are beautifully adjusted and integrated to the higher. Take, for instance, matter. Matter in the mineral kingdom is hard and rough. When it is organized into a cell, it becomes an apporpriate medium for the expression of life. Again matter as it is in the organized body of a plant is largely different from what it is in the organized body of man. In the case of man, matter becomes plastic enough to express the thoughts and feelings of mind. The eye beautifully mirrors the soul, and

iithfully reflects some of our deepest emo-
ons. A smile, a tear is the silent language
f the soul, it tells more than a legion of
ords can. So also the human throat be-
omes a most sensitive mike for the expression
f the soul's speech and song. I need not
ultiply instances. Suffice it to say that life
fts matter and transforms it into a fit instru-
ient for its expression, and mind transforms
oth life and matter into its sweet partner.

Five points have to be borne in mind in
is connection. Firstly, the triple process
evolution does not work separately, but in
–operation. Secondly, at each stage of
cent, it is not the lower that evolves the
gher; it is not the nisus precent in Space-
me as in Alexander's system, nor the Vital
npulse as visualized by Bergson that throws
the higher from the lower ; it is the influ-
ice from a higher plane that brings about
e miracle of a novelty, life from seemingly
ert matter, mind from apparently unconsci-
is life. Evolution is not a push, but a pull.
hirdly, evolution is possible because of an
rlier involution. By no magic whatsoever
uld mind have been evolved from life unless
was already secretly involved in it; by no

trick could life have been evolved from matter unless it was occultly involved in it. Fourthly, each grade of ascent in evolution is an emergent, not a resultant. Each grade of ascent in evolution is a novelty, a surprise, an incalculable, unpredictable event, a leap, a saltus. Life is not simply matter magnified, but qualitatively different; mind is not simply an enlarged edition of life, but the emergence of a new principle. Each higher grade of ascent is in the words of Aurobindo 'a miracle of metamorphosis rather than a natural predictable development.' Lastly, evolution, according to Aurobindo, is integral. This means that when a higher grade of ascent appears, the lower principles are also transformed. When life emerges, matter is also tranformed in order to become its fit medium, when mind emerges, life is also suitably transformed. So also when supermind will dawn on the earth, the entire gamut of matter, life and mind will be transformed.

We have seen that Indian philosophy generally emphasizes only the evolution of the individual. Aurobindo maintains that side by side with individual evolution, there is also cosmic evolution. We shall now see what he has to say about each of these.

Individual Evolution

Society only means individuals in relationship. A better human society is possible only if there are better individuals. Nature has been at pains for milllons of years to develop individuals, but the result has not been very satisfactory. Evolution through Nature is a long, tedious and painful process. A quick sovereign method of evolution for the individual is *Yoga.* Rebirth is an indispensable aid in this evolution. By Yoga, one rises superior to his lower nature and develops latent capacities; rebirth helps in the continuance of the experiences acquired and provides opportunities for acquisition of further experiences and self-development.

Aurobindo has his own technique of Yoga. It will not be possible to describe in detail his technique of Yoga. We can give only a brief summary of the method of Yoga as laid down by Aurobindo. His technique is based on the concept of *Yoga* in Bhagavadgitā.

Yoga, according to Aurobindo, means union of the individual consciousness with the

Divine. It also stands for the process that leads to this union. Yoga as conceived by Aurobindo is meant to bring about a total transformation and divinisation of the individual. Yoga, according to him, is not simply an isolated union of the soul with the Divine, leaving away the lower parts of nature as hopelessly irredeemable. It is not simply cutting oneself aloof from Prakṛti or Māyā, but transforming the psycho-physical equipment so as to make it a fit and honoured partner of the divinised life.

There are three important elements of this Yoga, viz., 1) Call and response 2) Calm and equality 3) Surrender.

1. *Call and response* Call means vigilant, constant aspiration, intense hunger of the soul for the Divine, sincere cry of the innermost heart to the Divine for acceptance and transformation. A sincere cry will always evoke response from the Divine. Without this response, the aspirant cannot make much headway in his evolution.

2. *Calmness and equality* : Calmness means serenity and comes about by the renunciation of egoistic desires and passions. A mind that

s agitated by the storm of passion is unable to atch the vibration of the higher planes, and osses receptivity. Equality is Aurobindo's ranslation of *Samatva*, recommended in the Gita. It means steering clear of, becoming ndifferent to the *dvandas* or pairs of opposites ike pleasure and pain, success and failure etc.

3. *Surrender*: This means complete, unquestioning self-dedication to the Divine. ays the greatest stress on this aspect of his ogic discipline. The more one can surrender o the Divine, the greater is the response. here is an invasion, an influx of power from bove that transforms even the most fallen. his is the greatest mystery of the spiritual life, nd can hardly be understood by the hardeaded, self-centred, self-reliant logomachist.

One has to abolish one's ego completely or which Aurobindo highly recommends ita's method of *Kartṛtvābhimāna tyāga*—bandonment of all sense of doership, *anāṣakti*—detachment to the fruit of work, and *Īśvaārpaṇa buddhi* — doing every work as an ffering to God.

The more an aspirant abolishes his sense f ego and surrenders himself whole-heartedly to the Divine, the more does the power of the Supreme take charge of him and transform him.

Aurobindo maintains that the psychic pressure is of immense help in the evolution of the individual. He says that there is a spark of the Divine flame residing in the innermost recess of the heart, in the *hṛdaya-guhā* or *daharākāśa* as described in the Upaniṣads. Aurobindo calls it the 'psychic being'. It is the same as the *pratyagātmā* of Kathopanisad or *Caitya-puruṣa* of Bhāgavata. The psychic being guides the aspirant and helps him in his evolution. The more one cancels the ego-sense, the more does the psychic being come to the front and serve as a guide in the onward march of the individual.

Aurobindo maintains that the ideal of *Kaivalya* or isolation of puruṣa from prakṛti or Māyā upheld by Sāṅkhya and Pātañjala Yoga and Śaṁkara does not bring about the total evolution of man. It is only an ideal of liberation from the cycle of birth and death. It is only aimed at the realization of self as something different from Prakṛti or Māyā and leaves behind the lower nature of mind, life and body as something despicable, and incapale of being regenerated. It is defeatism, scapism. Aurobindo upholds the ideal of ntegral *yoga*, of total formation and divinisa- ion of mind, life and body, of a free, gnostic eing down here on the earth.

osmic Evolution

As has already been said evolution, accor- ing to Aurobindo, means not only the volution of the individual, but also cosmic volution or in otherwords the evolution of the ntire scheme of matter, life, soul and mind. he highest grade of evolution that has been chieved so far is mind. Mind has many nowned victories to its credit as is evident om the achievements of science and techno- gy, but it has singularly failed to grasp uth, to unravel the jig-saw puzzle, called e. The greatest expression of mind is tellect or reason. Bergson says that intellect its very nature is unfitted to know truth. ind or Reason wants to grasp Truth by vision. It views life in bits and fails to mprehend it in its wholeness. This is what urobindo says about Reason.

"She drags huge knowledge—bales through matters' dust
To reach utility's inner bazar.
Apprentice she has grown to her old drudge;
An aided sense is her seekings' arbiter.
This now she uses as the assayer's stone.
As if she knew not facts are husks of truth,
The husks she keeps, the kernel throws aside"
(Sāvitrī, Book II, Canto X)

Mind sunders the whole but wants some how to restore it. It is painfully conscious of its incompleteness and has an intense urge to complete itself by becoming something more than itself. It is Supermind alone that can transform it. There is a triple process of transformation by which mind can receive the healing touch of the Supermind.

Triple Transformation

(1) Psychic Transformation

The first step in this process is the psychic change. As has already been said, the psychic being is a spark of the divine flame residing in the central core of our being. It uses the body, life and mind as its instruments but is never affected by their weakness. It is full of ove for the Divine and is aflame for the nanifestation of God's grace upon the earth.

Aurobindo calls our surface-soul the lesire-soul. It works in our vital cravings and s characterized by a sense of possessiveness nd enjoyment. The psychic being is our leeper and real self. It is, however, thickly eiled and remains behind watching the opeations of our mental, vital and physical being. he first step in integral transformation onsists in bringing the veiled psychic being to he surface-consciousness and making it an ctive principle of our life. The more we get id of egoistic desires and surrender ourselves o the divine, the more does the psychic being ome in the front and take charge of our ersonality and help in its purification and nlightenment.

2) Spiritual Transformation

Psychisisation alone will not bring about osmic transformation. In order that mind ay ascend to the Supermind, there has to be ransformation by the spiritual consciousness. he principles of consciousness above the mind re Higher Mind, Illumined Mind Intuition and Overmind. The Higher Mind is a higher thought which comes to acquire knowledge not by the mediate principle of syllogistic reasoning but immediately. It is aluminous thought-mind.

The Illumined Mind is not a thought or an idea, but a spiritual light. It acquires knowledge by a flash. It has a greater powers for integration than the Higher Mind·

Intuition is knowledge by identity. The subject knows the object by feeling his identification with it. In the human mind, its action is largely hidden by 'the intervention of our normal intelligence.'

Overmind is in direct contact with the Supramental Truth-Consciousness. It is a link between Mind and Supermind. Overmind is the highest stage in the spiritual consciousness, but it is still within the sphere of Ignorance. Even when the overmind dawns, consciousness is not completely released from Ignorance.

(3) Supramental Transformation

Upto Overmind, the stages of evolution are still within the realm of Ignorance· The ascent to Supermind is entirely an ascent to knowledge. When the Supramental Truth-Consciousness dawns on the Earth, there will be all-round tranformation, and man will be transformed into a superman, the Gnostic Being. At first, it will manifest itself in a few individuals; gradually there will be the supramentalisation of the entire universe.

The supermind is the great alchemist that will turn the gross material of the earth, earthy into pure. brilliant gold,

Behind even the Supermind stands Saccidānada poised in supreme Wisdom and Love. Like a loving gardener, He has cast his seeds into the dark, sub-soil of the earth, and is fondly looking for the day when His seeds will grow into beeutiful flowers of humanity.

As a poet puts it :

"Though still confused his service unto Me
I soon shall lead him to a clearer morning.
Sees not the gardener, even while he buds his tree,
Both flower and fruit the future years adorning?"

Today there is so much of strife and discord in the world, we stand benighted in the howling wilderness of its sensate civilization and are filled with despair. In this hour of gloom has appeared Aurobindo with a heartening message of hope and proclaims that Supramental Consciousness shall descend on earth, and cure it of all its woes.

"Never an age, when God has need of him
Shall want its man, predestined by that need
To pour his life in fiery word and deed
The great Archangel of the Elohim."

Conclusion

We may now sum up the chief features of Aurobindo's philosophy of evolution.

1. Evolution is spiritual. It is spirit that has descended into the Inconscient. It is spiritual force again that will lift humanity out of the inconscient. The materialistic evolution envisaged by Western thinkers and Sāṅkhya is, according to Aurobindo, untenable.

2. Evolution is not mechanical. The Universe is not an automatic machine that goes on adjusting means to end without any fore-knowledge or aim. Evolution is teleological.

3. Involution precedes evolution. First here is descent of the higher principles into he inconscient, then there is ascent. Ultimate eality for Smuts and other thinkers is naterial atom. Life and mind cannot emerge rom matter unless they are involved in it.

4. Evolution is emergent. The higher rinciple is not simply a magnified form of the wer. It is new in quality. Alexander has so advanced a theory of emergent evolution, ut there are striking differences between the ew of Aurobindo and that of Alexander. lexander believes that Space-Time is the atrix of evolution, whereas Aurobindo belie-s that Saccidānanda is both the alpha and nega of the evolutionary process, God for urobindo is an ever-present reality, whereas e is only a future possibility for Alexander.

For Whitehead also evolution is emergent, t creativity as conceived by Whitehead is ly an abstract, unconscious principle. It is conceivable how such a principle can direct smic evolution. Whitehead seems to be aintaining two kinds of evolution, one of the rld which is evolving from a state of flux to rmanence, another of God who is evolving from permanence to a fluent state. Aurobindo cannot acquiesce in the conception of such a God. According to Aurobindo, there is only one process of evolution, viz., from the lower to the higher.

Like Aurobindo, Hegel also believes in spiritual evolution, but he maintains that there is complete continuity in evolution, whereas Aurobindo maintains that there are sudden emergents of higher principles in which the lower ones do not continue. Further, Hegel thinks that Thought or Idea is the highest principle. Aurobindo maintains that the highest principle is Supermind or Saccidānanda.

5. Aurobindo believes that the Absolute is both Being and Becoming. Bergson maintains that Becoming is the sole reality. Śaṅkara maintains that only Being is real, Becoming is an illusion. In opposition to both, Aurobindo contends that both Being and Becoming are only two poises of the Absolute.

6. Aurobindo emphasizes the principle of transformation of the lower principles on the emergence of the higher ones. Practically all systems of Indian philosophy ignore this

principle of transformation. But Aurobindo says that evolution is not complete unless the lower principles are transformed. The Absolutist Śaiva philosophy and Tantras also believe in the transformation of the lower, but like all other systems of philosophy, they too have thought of only the evolution of the individual and transformation of the lower principles in the case of the individual. Aurbindo however, believes both in individual Evolution and Cosmic Evolution, avers that in integral evolution there is transformation of the lower principles both in the case of the individual and the world.

This, in brief, is the grand strategy of evolution as envisaged by Aurobindo. He combines in himself the role of the poet, philosopher and prophet.

Two other important books on evolution have appeared within the last few years, one ntitled "Human Destiny" by Lecomte du Nouy, and another entitled, "The Phenomenon of Man" by Chardin. Both boldly affirm that it is impossible to attribute the birth of life nd its evolution to the simple play of chance nd that the further evolution of man will be in the direction of his mind. But none of them has had a clear vision of what it would be and how it would be accomplished. Aurobindo has boldly prophesied that the Supramental consciousness will descend on earth, that man will be divinised and that there will be total transformation of body, life and mind. This is not merely poetic dream, but has been based on closely reasoned argument and insight. Many have hailed Aurobindo as the harbinger of a new message; some have poured ridicule over his philosophy and dubbed it as sloppy-minded sentimentality or utopian fiction, but truth is stranger than fiction, and who can deny it its right to appear in a strangely new, unpredictable form? The drama of life has been going on on this planet for millions of years, and no one has yet guessed what its fifth Act is going to be. Tennyson has struck an optimistic note in the following lines :

"Act first this Earth, a stage so gloom'd with woe.
You all but sicken at the shifting scenes :
And yet be patient. Our Playwright may show
In some fifth Act what this wild Drama means."

Aurobindo has convincingly indicated what the fifth Act of this drama is going to be and has even given fascinating details of the Epilogue. He tells us that it is going to be the marriage of earth and heaven and assures us that the banns have already been put out.

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ERRATA

Page	*Line*	*For*	*Read*
91	1	cansciousness	conciousness
95	2	while	white
96	15	.	;
97	16	Being	Becoming
98	3	Mind is necessarily	Mind is not necessarily
101	19	confirmity	conformity
106	9	ṣhef going	forthgoing
107	14	At	It
107	16	above	alone
109	16	precent	present
113	3	losses	loses
113	10	lays	Aurobindo lays
116	3	inner	immense
118	8	powers	power

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